



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182
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SUBJECT: NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT

PROJECT TITLE: PROPOSED RULE 410: ODORS FROM TRANSFER STATIONS AND MATERIAL RECOVERY FACILITIES

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, prepared this Draft Environmental Assessment (EA) which assesses potential adverse environmental impacts that may result from implementing the proposed project identified above pursuant to its certified regulatory program (SCAQMD Rule 110).

This letter, the Notice of Completion (NOC), and the draft EA are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary. The project's description, location, and potential environmental impacts are described in the NOC.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to **Mr. James Koizumi (c/o CEQA) at the address shown above, or sent by FAX to (909) 396-3324 or by e-mail to jkoizumi@aqmd.gov**. Mr. Koizumi can be reached by calling (909) 396-3234. Comments must be received no later than 5:00 PM on August 22, 2006. Please include the name and telephone number of the contact person for your agency. **Questions relative to the proposed rule should be directed to Mr. Robert Gottschalk at (909) 396-2456.**

The Public Hearing for the proposed rules is scheduled for September 8, 2006. (Note: Public meeting dates are subject to change. Please refer to SCAQMD website Calendar of Events for current schedule www.aqmd.gov).

Date: July 20, 2006

Signature: Steve Smith

Steve Smith, Ph.D.

Program Supervisor, CEQA Section

Planning, Rule Development and Area Sources

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

21865 Copley Drive, Diamond Bar, CA 91765-4182

NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:

Notice of Completion of a Draft Environmental Assessment for Proposed Rule 410 – Odors from Transfer Stations and Material Recovery Facilities

Project Location:

South Coast Air Quality Management District: the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties) and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project:

Proposed Rule (PR) 410 – Odors from Transfer Stations and Material Recovery Facilities, would reduce odors from new and existing transfer stations and material recovery facilities. PR 410 would require operators of affected facilities to reduce odors from a combination of odor control and housekeeping techniques.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning, Rule Development and Area Sources –
CEQA

Draft EA and all supporting documentation are available at:

SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

or by calling:
(909) 396-2039**or by accessing the SCAQMD's website at:**
<http://www.aqmd.gov/ceqa/aqmd.html>**The Notice of Completion is provided through the following:**

☒ Los Angeles Times (July 21, 2006) ☒ SCAQMD Website ☒ SCAQMD Mailing List

Draft EA Review Period:

July 21, 2006 to August 22, 2006

Scheduled Public Meeting Dates

Public Hearing: September 8, 2006

[Please note that meeting dates are subject to change. Refer to the SCAQMD website Calendar of Events for current schedule - www.aqmd.gov.]

The proposed project will have no statewide, regional or areawide significance, therefore no scoping meeting was required (pursuant to Public Resources Code §21083.9(a)(2)) or held for the proposed project.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Environmental Assessment for

Proposed Rule 410 – Odors from Transfer Stations and Material Recovery Facilities

July 2006

SCAQMD No. 060706JK

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TABLE OF CONTENTS

CHAPTER 1 - PROJECT DESCRIPTION

Introduction.....	1-1
Legislative Authority	1-1
California Environmental Quality Act.....	1-1
Project Objective.....	1-2
Project Location	1-2
Regulatory Background	1-3
Project Description.....	1-5
Transfer Station and Material Recovery Facility Operations	1-9
Affected Facilities	1-10
Odor Background.....	1-11
Available Control Technologies	1-12

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction.....	2-1
General Information.....	2-1
Environmental Factors Potentially Affected.....	2-1
Determination	2-2
General Effects of the Proposed Project	2-3
Environmental Checklist and Discussion	2-5

FIGURES

Figure 1-1 – South Coast Air Quality Management District	1-3
Figure 1-2 – Total Odor Complaints for Five-Year Period	1-11

TABLES

Table 1-1 – Permitted Throughput Range of Facilities Subject to PR 410	1-18
Table 2-1 – Air Quality Significance Thresholds	2-9
Table 2-2 – Construction Impacts from Installation of Two Tilt-up Walls and Three Wind Barriers	2-10
Table 2-3 – Operational Emission Summary.....	2-12
Table 2-4 – City of Los Angeles Noise Requirements	2-32
Table 2-5 – Typical Construction Noise Sources	2-32

APPENDIX A – ABBREVIATIONS AND ACROYNMS

APPENDIX B – PROPOSED RULE 410

APPENDIX C – ASSUMPTIONS AND CALCULATIONS

CHAPTER 1 - PROJECT DESCRIPTION

Introduction

Legislative Authority

California Environmental Quality Act

Project Objective

Project Location

Regulatory Background

Project Description

Transfer Station and Material Recovery Operations

Affected Facilities

Odor Background

Available Control Technologies

INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, has prepared this draft Environmental Assessment for Proposed Rule (PR) 410 – Odors from Transfer Stations and Material Recovery Facilities. PR 410 is designed to reduce odors from facilities conducting transfer and sorting operations. Transfer stations are where municipal solid waste, greenwaste, and construction and demolition materials are transferred from small vehicles such as refuse trucks to large transfer trucks for transport to landfills, recycling centers, and other disposal sites. Material recovery facilities (MRFs) sort and separate recyclable materials from solid waste.

PR 410 is a direct result of an odor control strategy for solid waste facilities proposed in the Cumulative Impacts White Paper, which was approved by the Governing Board in September 2003. The proposed odor rule was developed as a result of reviewing SCAQMD records, which showed a high number of nuisance odor complaints from transfer stations and MRFs.

Throughout this document, references to the proposed project or PR 410 are used interchangeably.

LEGISLATIVE AUTHORITY

The California Legislature created the SCAQMD in 1977¹ as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and in portions of the Salton Sea Air Basin and Mojave Desert Air Basin. The SCAQMD's Air Quality Management Plan (AQMP) does not contain any control measures to reduce odors from transfer stations or MRFs. PR 410 is a direct result of a strategy proposed in the White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (Cumulative Impacts White Paper). In September 2003, the Governing Board approved the Cumulative Impacts White Paper, including Control Strategy #10, recommending development of a Pilot Odor Abatement Program in order to prevent exposure to odors. Due to a high number of nuisance odor complaints from transfer stations and processing facilities, this industry was selected for development of the pilot odor rule.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

PR 410 is a "project" as defined by CEQA Guidelines §15378 and California Public Resources Code §21065. SCAQMD is the lead agency for this project and has prepared this draft EA with no significant adverse environmental impacts pursuant to its certified regulatory program. California Public Resources Code §21080.5 allows public agencies with certified regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified its regulatory program. The SCAQMD's regulatory program was certified on March 1, 1989, and is codified as SCAQMD Rule 110.

An environmental impact is defined as an impact to the physical conditions that exist within the area which would be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, or objects of historic significance. CEQA and Rule 110 both require that potential

¹ The Lewis-Presley Air Quality Management Act, Health & Safety Code §§40400-40540.

significant adverse environmental impacts of proposed projects be evaluated, and that feasible methods to reduce or avoid these significant adverse environmental impacts be implemented. To fulfill the purpose and intent of CEQA, the SCAQMD has prepared this draft EA to address the potential significant adverse environmental impacts associated with implementing PR 410. The draft EA is a public disclosure document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental effects of the proposed project; and (b) be used as a tool by decision makers to facilitate decision making on the proposed project.

SCAQMD's review of the proposed project shows that the project would not have significant adverse effects on the environment. Therefore, no alternatives or mitigation measures are required to be included in this draft EA to avoid or reduce any significant effects on the environment (CEQA Guidelines §15252(b)(2)). The environmental checklist and discussion in Chapter 2 supports the conclusion of no significant adverse environmental impacts.

All comments received during the public comment period on the analysis presented in this draft EA will be responded to and included in the Final EA. Prior to making a decision on the proposed project, the SCAQMD Governing Board must review and certify the Final EA as providing adequate information on the potential adverse environmental impacts of PR 410.

PROJECT OBJECTIVE

The objective of PR 410 – Odors from Transfer Stations and Material Recovery Facilities, is to reduce odors from transfer station and MRF operations to reduce public exposure to nuisance odors.

PROJECT LOCATION

The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin (Basin) (Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subregion of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the MDAB (known as North County or Antelope Valley) is bounded by the San Gabriel Mountains to the south and west, the Los Angeles/Kern County border to the north, and the Los Angeles/San Bernardino County border to the east. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains to the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).

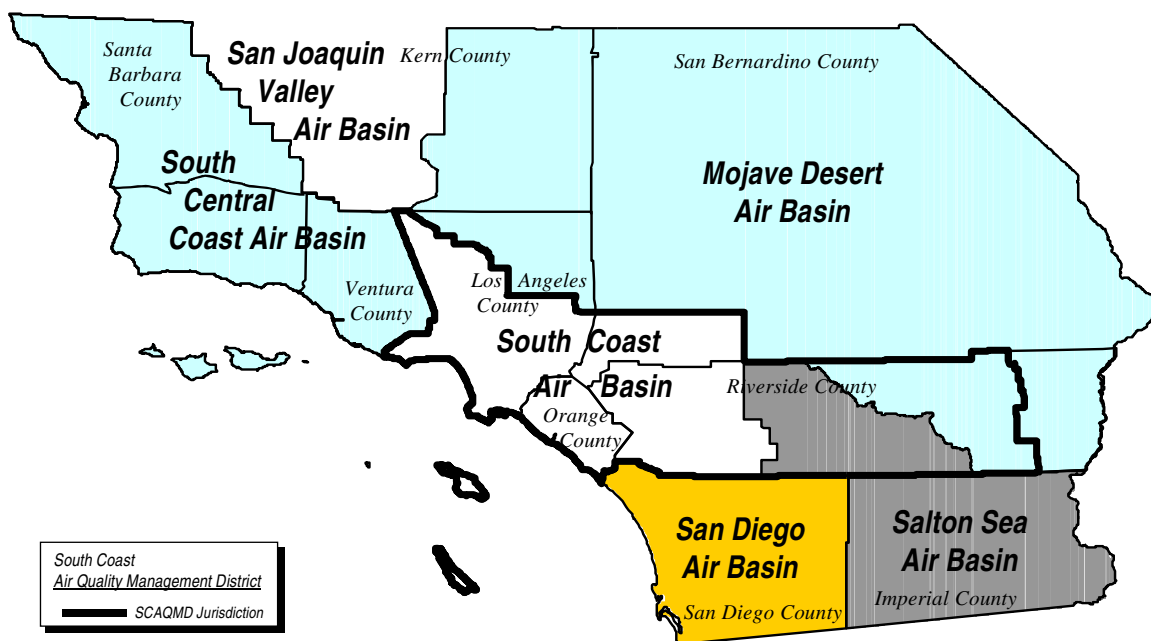


Figure 1-1
South Coast Air Quality Management District

REGULATORY BACKGROUND

PR 410 is a direct result of a strategy proposed in the Cumulative Impacts White Paper. In September 2003, the Governing Board approved the Cumulative Impacts White Paper, including Control Strategy #10, recommending development of a Pilot Odor Abatement Program in order to prevent exposure to odors. Due to the high number of nuisance odor complaints from transfer stations and processing facilities, this industry was selected for development of the pilot odor rule. The following subsections briefly describe the SCAQMD's existing rule that addresses odors and explains why there has been a proliferation of transfer stations and MRFs.

Rule 402 - Nuisance

Rule 402 prohibits the discharge of air contaminants or other material from any type of operations which can cause nuisance or annoyance to any considerable number of people or to the public or which endanger the comfort or repose of any such persons, or the public. Historically, some transfer stations and MRFs that cause a public nuisance because of odors have been cited for violation of Rule 402.

Rule 1131.1 - Chipping and Grinding Activities

Rule 1133.1 establishes holding or processing (i.e., chipping and grinding or on-site applications) time requirements for greenwaste and foodwaste chipping and grinding activities in order to prevent inadvertent decomposition associated with stockpiling greenwaste or foodwaste for extended periods of time. The holding/processing times established for foodwaste and various types of greenwaste (curbside, non-curbside, mixed) are primarily in-line with normal practice of chipping and grinding operations and do not interfere with AB 939 diversion goals (waste diversion from landfills). Rule 1133.1 does not address odors from handling and transfer of greenwaste that is not used in a chipping and grinding operation.

AB 939

In 1989, Assembly Bill 939, (Integrated Waste Management Act), was adopted due to a statewide increase in the waste stream and decrease in landfill capacity. AB 939 mandates a reduction of waste being disposed. Diversion goals were set at 25 percent by 1995 and 50 percent by 2000. The diversion rate is the percentage of the total amount of waste that is diverted from disposal at a landfill through reduction, reuse, recycling, composting or energy from waste programs.

As a result of AB 939, the California Integrated Waste Management Board (CIWMB) was established. Regulations developed to implement AB 939 are codified under Title 14 and Title 27 of the California Code of Regulations. Regulations specific to transfer stations and MRFs are contained in Title 14, Chapter 3, Article 6. This article contains operating standards and other regulatory requirements for the following facilities and operations:

- Sealed container transfer operations;
- Limited volume transfer operations;
- Direct transfer facilities;
- Emergency transfer/processing operations;
- Medium volume transfer/processing facilities; and
- Large volume transfer/processing facilities.

Solid waste transfer stations are facilities where municipal solid waste, green waste, and construction and demolition materials are transferred from smaller vehicles such as refuse trucks to larger transfer trucks for transport to landfills, recycling centers, and other disposal sites. Transfer trucks can generally hold 100 cubic yards representing three to five loads from refuse trucks. MRFs sort and separate recyclable materials from solid waste. Recyclable materials are transported to recyclers and the remaining non-recyclable solid waste is transported to landfills or other disposal sites.

To minimize the distances that refuse trucks travel between residents and commercial establishments, some transfer stations are located near residential communities. As a result, odors often emanate off-site causing a nuisance to residences and businesses. The SCAQMD's Rule 402 – Nuisance, prohibits public nuisances such as odors. Some transfer stations and MRFs have been issued Notices of Violations under Rule 402 due to odor complaints.

PROJECT DESCRIPTION

Proposed Rule 410 is designed to complement Rule 402. Proposed Rule 410 establishes minimum requirements for transfer stations and MRFs and offers a proactive approach to minimizing odors. Odors from transfer stations and MRFs are very site-specific, and depend upon a number of different factors, including the type of waste (municipal solid waste, greenwaste, construction and demolition materials, etc.), types of odor controls at a facility, among other factors. In addition, facility operators use a variety of operating practices to minimize offsite odors. Under Proposed Rule 410, each facility operator will be required to either submit to the SCAQMD a Rule 410 Odor Management Plan (Rule 410 OMP) or voluntarily submit to the Local Enforcement Agency (LEA) an Alternative Odor Management Plan (AOMP). At a minimum, both the Rule 410 OMP and the AOMP will include the methods or techniques the facility operators would use to minimize odors from their tipping floors, transfer tunnels, MRFs, and green waste operations. In addition, the OMPs must specify housekeeping requirements and include a community response protocol to respond to community complaints pertaining to odors.

Proposed Rule 410

(a) Purpose

Proposed Rule 410 will establish odor management practices and requirements to reduce odors from MSW transfer stations and MRFs. The proposed rule will be implemented in addition to existing enforcement of public nuisance under Rule 402.

(b) Applicability

The proposed rule applies to new and existing transfer stations and MRFs located in the district that have a permit issued by a LEA with a throughput of MSW of 100 tons per day or greater. MSW is defined as including food waste, yard trimmings, greenwaste, and other waste. It does not apply to direct transfer facilities, facilities handling only nonhazardous ash, and facilities handling only construction and demolition and inert debris.

(c) Definitions

This subdivision lists keywords related to municipal solid waste and related operations and defines them for clarity and to enhance enforceability. Please refer to Appendix B for a copy of PR 410 and its definitions.

(d) Enclosure Requirements for New and Modified Source

New and modified facilities have two compliance options. The first option is to enclose the tipping, sorting and transfer operations. The second option is to demonstrate an appropriate buffer zone around the facility. New facilities are those that have an operating permit issued by a LEA to tip more than 1,000 tons per day, and modified facilities are those with an incremental increase in throughput due to an increase of MSW of more than 1,000 tons per day in an approved permit, issued on or after January 2008 by a LEA; or facilities with a cumulative throughput of more than 3,000 tons per day after modification.

(e) Odor Management Plan (Rule 410 OMP)

All existing, new and modified facilities subject to this rule are required to submit a Rule 410 OMP or an AOMP. The two submittal options are: (1) submit a Rule 410 OMP directly to the

SCAQMD or; (2) voluntarily submit an AOMP to the SCAQMD that has been approved by the facility's LEA and is incorporated in a solid waste facility operating permit, T/PR, Report of RFI or other enforceable document issued by the LEA. Both OMPs must address: odor control from the tipping floor; waste transfer tunnels; MRF; housekeeping activities for the tipping floor, transfer tunnel and facility perimeter; and community response (installation of a contact sign, identification of a Community Coordinator, and odor complaint protocol).

The owner or operator of an affected facility who submits a Rule 410 OMP would be required to provide all information under the "Required Elements" if permitted throughput is greater than 100 tons per day, but less than or equal to 250 tons per day. If the permitted throughput exceeds 250 tons per day and is less than or equal to 1,000 tons per day, information under the "Required Elements" and "Level 1 Control Strategies" must be provided. If the permitted throughput exceeds 1,000 tons per day, information under the "Required Elements" and "Level 2 Control Strategies" must be provided.

Facility operators who modify their operations would be required to submit an updated Rule 410 OMP under any of the following conditions; if permitted throughput increases are greater than 250 tons per day or permitted throughput increases are greater than 1,000 tons per day. Alternatively facility operators with permitted increase greater than 1, 000 tons per day may submit a letter to the Executive Officer 180 days prior to increasing throughput explaining that the existing Rule 410 OMP already addresses all information required for facilities with a permitted throughput greater than 1,000 tons per day.

Within 60 days after notification from the Executive Officer that a previously approved Rule 410 OMP does not adequately address odors from any odor generating source at the facility, the owner or operator would be required to revise and resubmit an updated Rule 410 OMP. An approved Rule 410 OMP shall remain in effect until an updated Rule 410 OMP is approved by the Executive Officer.

Approved Rule 410 OMP requirements would need to be posted, clearly visible for operators and inspectors, or as approved by the Executive Officer; and made available upon request to SCAQMD personnel. The owner or operator of a facility with an approved Rule 410 OMP will be required to conduct operations in a manner designated in the approved Rule 410 OMP and comply with all conditions in the approved Rule 410 OMP.

(f) Alternative Odor Management Plan (AOMP)

In lieu of filing a Rule 410 OMP, a facility operator may voluntarily submit an AOMP to the appropriate LEA and obtain enforceable permit conditions in a solid waste facility operating permit, T/PR, RFI, or other document issued by the LEA that have enforceable permit conditions in an operating permit issued by the LEA that address all applicable aspects of the Rule 410 OMP. A facility choosing to submit an AOMP to the LEA is required to file a copy of the approved AOMP with SCAQMD, including the operating permit, T/PR, RFI or other enforceable document issued by the LEA, and written documentation from the LEA of the approval date of the AOMP.

Approved AOMP requirements would need to be posted, clearly visible for operators and inspectors, or as approved by the Executive Officer; and made available upon request to SCAQMD personnel. The conditions of an approved AOMP shall be enforceable by the Executive Officer.

(g) Exemptions

The following operations are not subject to PR 410: composting operations subject to Rule 1133 and co-composting operations subject to Rule 1133.2.

Facilities with an Odor Impact Minimization Plan (OIMP) approved by the LEA or the CIWMB are not required to submit an OMP to SCAQMD, but must meet the requirements for an AOMP.

(h) OMP and Alternative OMP Plan Fees

Submittal of an OMP or an approved AOMP will constitute a plan for the purposes of fees assessed under Rule 306 - Plan Fees.

Appendix A - Rule 410 Odor Management Plan

This appendix contains “Required Elements”, and Level 1 and Level 2 “Control Strategies” to be included in a Rule 410 OMP. The “Required Elements” are mandated for all facilities subject to this rule with a permitted throughput of 100 tons per day or greater and are pertinent to the facility’s logistics, community response protocol and signage, housekeeping practices, protocol for handling odiferous loads, and logging of complaints. For larger facilities there is a requirement to install a weather monitoring station as well as logging the information.

In order to be approved, an OMP must contain all the following Required Elements:

- Facility information, including name, address, contact person and contact information;
- Permitted throughput for all types of waste processed;
- A requirement for facilities handling and storing greenwaste;
- Information on buffer zone, including distance to the nearest residence and sensitive receptor;
- Requirements, including several options, for facilities handling recyclable materials;
- A protocol for handling community complaints, including contact information on a Community Coordinator, and a requirement to conduct an odor survey when the facility receives odor complaints;
- A requirement for a contact sign so that members of the surrounding community can contact the facility directly with odor complaints;
- A requirement to maintain a paper log of all odor complaints received;
- A requirement for facilities with permitted throughput greater than 1,000 tons per day to install and operate a weather monitoring station that monitors temperature, humidity, wind speed and wind direction;
- A protocol for handling odiferous loads;
- Housekeeping activities, including minimum sweeping frequency for the tipping floor, transfer tunnel and facility perimeter;

- A minimum requirement for covering and parking trucks and trailers that are preloaded for transportation to a landfill or other disposal destination on the following day.

The Level 1 and Level 2 “Control Strategies” are menus of control options that can be used to control odors that pertain to specific odor generating areas of the facility such as the tipping floor, transfer tunnel, and MRF operations.

Level 1 -Control Strategies for Facilities Permitted Throughput Greater Than 250 Tons per Day and Less Than 1,000 Tons per Day

Odor Emission Point	Control Strategy
Tipping Floor	Handheld or overhead misting system; or
	Wind barriers surrounding two sides of tipping area; or
	Partial enclosure; or
	Complete enclosure; or
	Other equivalent odor control method approved by EO

Level 2: Control Strategies for Facilities with Permitted Throughput Greater Than 1,000 Tons per Day

Odor Emission Point	Control Strategy	
		and
Tipping Floor	Partial enclosure; or	Handheld or overhead misting system
	Complete enclosure; or	
	Other equivalent odor control method approved by EO	
Transfer Tunnel	Physical barriers at entrance or exit to the transfer tunnel; or	
	Maximum drop height from the tipping floor into transfer trucks of three feet or less; or	
	Misting system at the entrance or exit to the transfer tunnel; or	
	Other equivalent odor control method approved by EO	
Material Recovery Facility	Partial enclosure; or	
	Complete enclosure; or	
	Other equivalent odor control method approved by EO	

TRANSFER STATION AND MATERIAL RECOVERY FACILITY OPERATIONS

Types of Transfer Stations

There are several common types of transfer stations, including:

- **Direct tipping to trailers** – Waste collection trucks and other vehicles tip directly into a transfer truck. Transfer trucks typically hold 100 cubic yards and can accommodate three to five loads from waste collection trucks or many pickup loads.
- **Tipping on a floor** – This is the most typical arrangement for facilities subject to PR 410. Tipping of solid waste from a refuse truck onto a floor allows more efficient loading of transfer trucks than direct tipping to trailers, because the tipping floor provides a larger buffer waste capacity than direct tipping to trailers. The tipping floor also provides a place to extract recyclables, if the waste is not source-separated, and space to inspect for hazardous or other undesirable waste. A front loader is typically used to push waste into transfer trucks.
- **Pit tipping** – In this arrangement, refuse trucks tip their load into a large pit, allowing several trucks to unload simultaneously. This allows waste to be stored temporarily during peak operating hours. The pit may have either a walking floor in the bottom of the pit or it may have loaders to push the waste around. An advantage to pit dumping is having a tractor in the pit to crush the waste and maximize trailer loads.

These three types of transfer stations are usually configured so that transfer trucks with open-top trailers are loaded at a level below the tipping area. A clamshell or bucket is sometimes used to load transfer trucks to obtain maximum payload, level the load, remove undesirable materials, and to move piles of waste on the tipping floor.

The typical transfer arrangement routes transfer trucks down a one-way tunnel to the loading areas, and loaded trucks emerge on the opposite side of empty trucks.

Most transfer stations subject to PR 410 use open top trailers in a top-loading arrangement. Waste is not compacted in open-top trucks. Transfer trucks are required to be covered en route to the landfill to prevent windblown debris from the trailer during transit, so trailers normally have a tarp or other membrane that is secured over the top of the load prior to transporting the waste.

Some transfer stations may use a compactor. Using a compactor station, waste is loaded into the hopper of a stationary compactor. Trucks back up to the compactor and the waste is pushed into the trailer as a compacted slug. These operations use a rear-loading arrangement. Transfer trucks used with a compactor use reinforced trailers.

Municipal solid waste can only remain on site at a transfer station for a maximum of 48 hours, by CIWMB regulations, and operating permit conditions.

Material Recovery Facilities

A MRF accepts materials, whether source separated or mixed, and separates processes and stores them for later use as raw materials for remanufacturing and reprocessing. After separation, residual waste is disposed offsite. Often, MRFs are located at the same site as transfer stations.

Separation of recyclable materials may be accomplished by mechanical means, including:

- Disc screens – used to separate materials by size.
- Trommels – rotating cylindrical screens inclined at a downward angle, where separation occurs as material travels down the drum.
- Air classification – utilized to separate light materials like aluminum, cartons, and plastics from heavier materials using an air stream.
- Non-ferrous metal separators, such as rotating disc separators, which set up an electrical current in non-ferrous materials causing them to be deflected.
- Detect and route (DAR) systems can be used to separate glass, plastic and cartons. In a DAR system, materials are identified by sensors and are removed from the waste stream when the conveyor passes the appropriate diversion point. Lighter materials can be diverted by air jets aligned along one wall of the conveyor. Heavier objects can be diverted by a ram or tilt plate.

Separation of recyclables may also be accomplished manually. Often a MRF will utilize both mechanical and manual separation.

Greenwaste Transfer and Handling Activities

Greenwaste is any organic waste material generated from gardening, agricultural, or landscaping activities, including, but not limited to, leaves, grass clippings, tree and shrub trimmings and plant remains. Schedules for grinding or removal of greenwaste are addressed in Rule 1133.1 – Chipping and Grinding Activities. Greenwaste transfer activities in the district are typically completed in unenclosed areas. Greenwaste can remain at a transfer station for up to seven days

AFFECTED FACILITIES

There are 141 existing transfer stations and MRFs in the district. Of the 141 existing transfer stations and MRFs, 93 of the facilities have less than 100 tons per day of throughput; therefore, would not be subject to PR 410. Of the existing facilities, 40 have permitted throughput of 250 tons per day or greater for the purpose of storing, handling, or processing the waste prior to transferring the waste to another solid waste operation or facility. Eight of the active transfer stations and MRFs have a permitted throughput of greater than 100 tons per day and less than or equal to 250 tons per day.

The one planned MRF already complies with the PR 410 requirements for new facilities odor requirements; therefore, would not require any construction or operational changes because of PR 410. SCAQMD staff has not identified any other planned transfer stations or MRF at this time that would be required to comply with PR 410 requirements.

Existing facilities were analyzed for the numbers of nuisance odor complaints and Notices of Violation (NOVs) they have received over a five year period. As explained in the following subsection, adoption of PR 410 included evaluating NOVs and odor complaints received by affected facilities as well as interviews of SCAQMD compliance staff who visited the affected facilities.

Data Resources

During this rule development process, SCAQMD staff visited over 15 facilities to review the operating practices and equipment used for odor control. The throughput of the facilities visited ranged from 400 tons per day to 6,000 tons per day. SCAQMD compliance personnel are familiar with many of the other facilities subject to PR 410 from prior visits and were interviewed about the operating configurations, odor control equipment and operating practices of facilities they visited. In addition, SCAQMD staff worked with the LEA to obtain additional data on facilities affected by PR 410.

For each facility information was collected on throughput, enclosure configuration, use of misting systems at the tipping floor, and greenwaste handling operations, among other data. Numerous site visits provided insight into the typical housekeeping activities, including sweeping schedules, storage of recycled products, and other information leading to potential odors at offsite locations, such as residential neighborhoods.

The range of permitted throughput, for existing facilities is given in Table 1-1. Permitted throughput is the throughput allowed in tons per day in a facility's operating permit, issued by the LEA. The permit may or may not specify a throughput limit for the individual components of the waste stream that are allowed by the permit. For example, a permit issued to a transfer station may allow greenwaste, construction and demolition materials, or other types of waste in addition to municipal solid waste. However, permit limits are often given only for the total throughput.

Table 1-1
Permitted* Throughput Range of Facilities Subject to PR 410

Throughput Tonnage (tons/day)	Number of Facilities
100 - 250	8
251 - 500	8
501 - 1,000	5
1001 - 2,000	16
2001 - 5,000	9
>5,000	2
Total	48

*Permitted throughput is the throughput a facility is allowed in the operating permit issued by the LEA.

ODOR BACKGROUND

Odor Complaint Data

Transfer stations and MRFs in the district were analyzed for the numbers of nuisance odor complaints and Notices of Violation (NOVs) they received from January 2001 through December 2005. During that five-year period, a total of 2,352 complaints were received, from

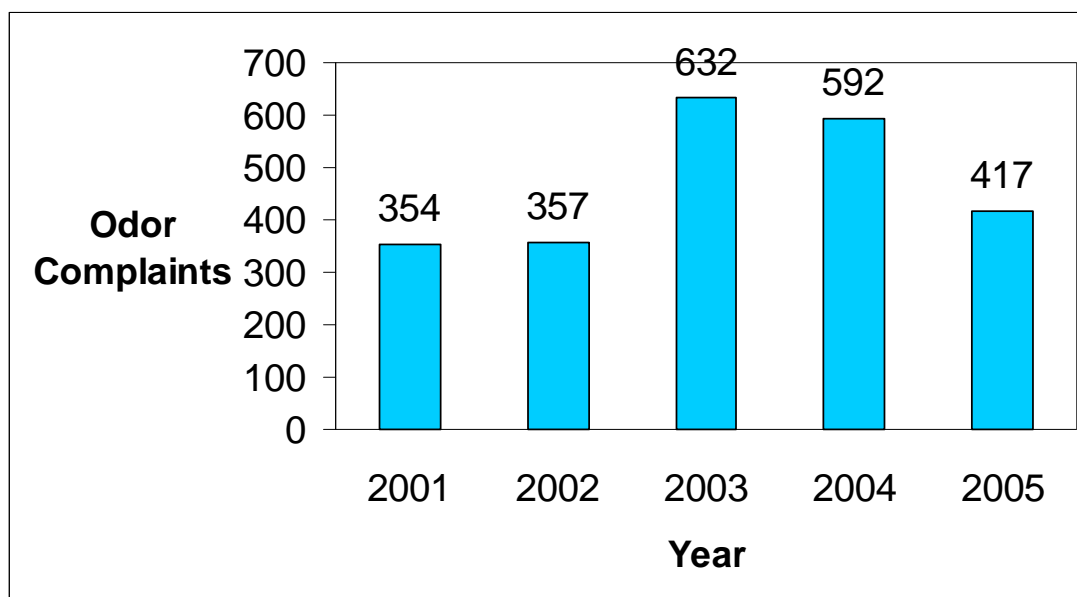
13 facilities. Of the 2,352 total complaints, 1,549 were verified by SCAQMD inspectors. In general, a “verified” complaint is characterized by the following:

1. An SCAQMD inspector responds to the complaint;
2. The inspector smells the odor the complainant described; and
3. The inspector traces the odor back to its source.

Once an odor complaint has been verified, additional action may be taken by the inspector, depending on the length and severity of the odor problem, and the number of people that have complained. This may include issuance of a NOV for public nuisance.

In addition to odor complaints, the number of NOVs issued to each facility in the PR 410 universe was also evaluated for the period from January 2001 through December 2005. The number of odor complaints for the five-year period from January 2001 through December 2005, shown in Figure 1-2, averaged 470 per year.

Figure 1-2 – Total Odor Complaints for Five-Year Period



AVAILABLE CONTROL TECHNOLOGIES

PR 410 would rely on existing technologies and housekeeping practices that are currently available and, in some cases, currently employed by some of the affected facilities. No new technologies or housekeeping practices were identified during the development of PR 410 beyond those identified in the following subsections. PR 410 does allow facility operators to suggest alternative odor control techniques that are not listed in PR 410 Appendix A; however, since no new odor control techniques were identified, these unknown odor control techniques are speculative and can not be analyzed at this time. The following subsections describe the primary odor generating sources regulated by PR 410 and appropriate control technologies and housekeeping practices.

Odor Control – Tipping Floor Operations

Odors from tipping floors at transfer stations and MRFs can be controlled by the following methods:

- Misting systems (portable or overhead)
- Two sided wind barriers (without roof)
- Partial enclosures (two walls and a roof)
- Full enclosure

Odor Control – Transfer Tunnels

Odors from transfer tunnels at transfer stations and MRFs can be controlled by the following methods at the exit of the tunnel:

- Odor barrier
- Neutralizer

Odor Control – Green Waste Operations

Odors from transfer tunnels at transfer stations and MRFs can be controlled by the following methods:

- Two sided wind barriers (without roof)
- Partial enclosures (two walls and a roof)
- Full enclosure

Odor Control – Housekeeping

- Park pre-loaded trucks out of the sun or in covered parking areas
- Cover trucks within 15 minutes after loading with an odor-impermeable membrane
- Sweeping schedule for tipping floor, transfer tunnel and facility parameter once per operating day
- Store dairy and organic containers in side, partial, or full enclosure

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed rule.

GENERAL INFORMATION

Name of Proponent: South Coast Air Quality Management District

Address of Proponent: 21865 Copley Drive
Diamond Bar, CA 91765

Lead Agency Name: South Coast Air Quality Management District

CEQA Contact Person: James Koizumi (909) 369-3234

Rule Contact Person: Robert Gottschalk (909) 396-2456

Name of Project : Proposed Rule 410 – Odors from Transfer Stations and Material Recovery Facilities

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. Any checked items represent areas that may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Geology and Soils	<input type="checkbox"/> Population and Housing
<input type="checkbox"/> Agricultural Resources	<input type="checkbox"/> Hazards and Hazardous Materials	<input type="checkbox"/> Public Services
<input checked="" type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Hydrology and Water Quality	<input type="checkbox"/> Recreation
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Land Use and Planning	<input type="checkbox"/> Solid/Hazardous Waste
<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Transportation./Traffic
<input type="checkbox"/> Energy	<input type="checkbox"/> Noise	<input type="checkbox"/> Mandatory Findings

DETERMINATION

On the basis of this initial evaluation:

- ☒ I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- ☐ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.
- ☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: July 19, 2006

Signature: _____

Steve Smith

Steve Smith, Ph.D.
Program Supervisor – CEQA
Planning, Rule Development, and Area
Sources

GENERAL EFFECTS OF THE PROPOSED PROJECT

Implementation of PR 410 is expected to reduce odors from transfer station and MRF operations. PR 410 will provide a more proactive approach to managing and reducing odors. PR 410 does not require construction of new transfer stations or MRFs, it imposes odor control requirements on new and existing facilities. The analysis in this chapter focuses only on the potential environmental impacts associated with installing odor controls. Proposals to build new transfer stations and MRFs would be subject to CEQA process prior to approval and construction.

Summary of Rule Requirements that May Impact Environmental Areas:

Odors from transfer stations and MRFs are very site-specific, and depend upon a number of different factors, including the type of waste, proximity to neighbors, types of odor controls at a facility, among other factors. In addition, facility operators use a variety of operating practices to minimize offsite odors. Under PR 410, each facility operator will be required to submit either a Rule 410 OMP or an Alternative OMP. The OMP will identify the particular type of equipment or operating practice at each potential area for odor formation. The OMP is then reviewed by the SCAQMD and approved or disapproved. Once the OMP is approved, an approval letter is issued with conditions specific to the content in the OMP. The approval letter is an enforceable document which SCAQMD inspectors can use to ensure compliance.

Proposed Odor Control for Odor Management Plans

SCAQMD staff identified 12 facilities that receive 1,000 tons per day or less of municipal solid waste. Five of the twelve facilities do not have enclosed or partially enclosed tipping floors. It is assumed that these five facilities would install misting systems, and increase housekeeping activities, such as sweeping, to reduce odors in accordance with an approved OMP.

SCAQMD staff identified 27 facilities that receive over 1,000 tons per day of solid waste. Twenty-five of the facilities currently meet the minimum standards for tipping floor odor control (misting systems or partial enclosures). SCAQMD staff assumes that, at the two facilities, operators would add additional walls to existing buildings to control odors from the tipping floor. Staff assumes that 12 facilities would need to install misting systems to reduce odors. All 27 facilities are expected to install weather stations and increase housekeeping activities.

Minimal requirements of odor management plans that may impact environmental areas include:

- Facilities that process more than 250 tons per day of greenwaste are required to conduct all greenwaste tipping, sorting and handling activities within a physical barrier.
- Within 12 hours after recycled containers that contained dairy products or other organic foodstuffs are bailed for shipment, operators are required to store the containers completely covered in a tarp or odor-impermeable membrane, in a partial enclosure or in a full enclosure.
- Facilities with permitted throughput greater than 1,000 tons per day are required to install a weather monitoring station or other Executive Officer approved method to monitor temperature, humidity, and wind speed and direction.
- Sweeping tipping floors, transfer tunnels and all areas inside and outside the facility where trash accumulates is required at least once per operating day.

- Operators are required to cover open-top trucks in a top-loading configuration within 15 minutes after loading and park pre-loaded trucks or trailers in a covered location within 60 minutes of loading.
- Facilities with permitted throughput greater than 1,000 tons per day are required to control emissions from:
 - Tipping floors by full or partial enclosure or other Executive Officer approved method.
 - Minimizing drop heights from truck to tipping floor, install a misting system at the entrance or exit of the transfer tunnel based on prevailing winds, or other Executive Officer approved method.
 - Fully or partially enclosing MRFs or other Executive Officer approved method.
- Facilities with permitted throughput equal or less than 1,000 tons per day are required to control emissions from:
 - Tipping floors by full or partial enclosure, wind barrier, misting system or other Executive Officer approved method.

Other rule requirements that may impact environmental areas include:

- New facilities with a permitted throughput greater than 2,000 tons per day, modified facilities with incremental increases in throughput of more than 1,000 tons per day, or modified facility with a cumulative throughput of more than 3,000 tons per day after modifications are required to conduct tipping, sorting and transfer operations within the confines of an enclosure and demonstrate that there is no residence or sensitive receptor located within 1,000 feet of an odor generating source.
- Facilities for which a new residence or sensitive receptor is located within 1,000 feet of any odor generating source at a facility would be required to conduct tipping, sorting and transfer operations within the confines of an enclosure.

Estimation or Evaluation of Impacts from Requirements for New or Modified Facilities

New transfer station or MRF operations or modification to any existing facility which would increase solid waste throughput would be required to obtain a new permit or modify an existing solid waste permit and would also be required to obtain any other applicable permits, such as conditional use permits, etc.. These permits are discretionary permits. Any new or modified discretionary permit would require CEQA analysis pursuant to CEQA Guidelines §15000, et seq., unless specifically exempt from the CEQA process. The impacts and evaluation of those impacts will be evaluated in CEQA analysis for those projects.

Since the establishment of any new transfer station or MRF operation or modification of any existing facility that would increase throughput would be a result of a separate “CEQA” project, the impacts from new or modified facilities are not estimated or evaluated in this document. Any impacts from these future projects would be speculative, and are not required to be evaluated under CEQA Guidelines §15145.

Estimation or Evaluation of Impacts from Requirements for Existing Facilities

PR 410 would result in primary and secondary environmental impacts. Primary and secondary impacts and evaluation of impacts from requirements of PR 410 are evaluated in the Environmental Checklist and Discussion below.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	Potentially Significant Impact	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANCE CRITERIA

The proposed project impacts on aesthetics would be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

DISCUSSION

a) through d) PR 410 includes provisions for controlling odors from tipping floors, transfer tunnels, green waste handling areas. Odor control for these areas includes full or partial enclosures, misting systems and barriers. Wind stations would provide temperature, humidity, wind speed and wind direction information to assist operators in controlling odors. Since most of the large facilities (25 of 27 facilities that handle more than 1,000 tons per day of municipal solid waste) already utilize appropriate odor control techniques, and the capital cost difference between full or partial enclosures and the other options (misting systems); SCAQMD staff assumes that no new enclosures would be built. Staff estimates that at the remaining two large facilities with existing partial enclosures, operators may add an additional wall to control odors. Most facility operators are expected to rely on misting systems to control odors.

PR 410 does not required construction of new transfer stations or MRFs, but imposes odor control requirements for new or existing affected facilities. Since the affected facilities are zoned for industrial activities involving solid waste, the visual character of the vicinities of these facilities

may already be impacted. The addition of misting systems, weather stations and the addition of walls to existing partial enclosures required by PR 410 is not expected to change or may slightly improve the visual characteristics in the vicinity of the affected facilities.

Implementing the proposed rule may improve the visual character of affected facilities by requiring additional housekeeping operations. PR 410 is not expected to result in shifting operating hours from day to evening hours. As a result the proposed project is not anticipated to create or require any new sources of light or glare which would adversely affect day or nighttime views in any scenic areas.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on aesthetics. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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II. AGRICULTURE RESOURCES. Would the project:

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

Project-related impacts on agricultural resources would be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.

- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural uses.

DISCUSSION

a) and c) PR 410 would reduce odors from transfer stations and MRFs. The proposed rule does not, however, require the acquisition of any land for the construction of any building or structure and does not require conversion of farmland to other uses. The proposed amendments would not convert any existing, prime or unique farmland to a non-agricultural use; nor would the proposed rule would cause other changes to the existing environment which would result in the conversion of any existing, prime or unique farmland to a non-agricultural use. Any construction required to reduce odors would occur on-site at existing facilities. Affected new facilities would undergo a project-specific analysis pursuant to CEQA to determine any affects on agricultural resources and is outside the scope of the proposed project.

b) The proposed rule would reduce odors from transfer stations and MRFs operations in the district. The proposed rule has no effect on, and would not conflict with existing zoning or any Williamson Act contracts.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on agricultural resources. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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III. AIR QUALITY. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANCE CRITERIA

Impacts will be evaluated and compared to the significance criteria in Table 2-1. If impacts equal or exceed any of the following criteria, they will be considered significant.

DISCUSSION

(a) Pursuant to the provisions of both the state and federal CAA, the SCAQMD is required to attain the federal ambient air quality standards for all criteria pollutants. The SCAQMD's planning document which sets forth policies and measures to achieve federal and state air quality standards in the region is the AQMP. The AQMP includes measures which target stationary, mobile and indirect sources. These measures are based on feasible methods of attaining ambient air quality standards. The AQMP does not specifically contain a control measure regulating transfer stations and MRFs.

The SCAQMD Governing Board, however, approved Environmental Justice Initiatives in October of 1997 and enhancements to those initiatives in September of 2002. The Environmental Justice Workplan for 2003-2004 directed SCAQMD staff to prepare a white paper on cumulative impacts. In September 2003, the Governing Board approved the Cumulative Impacts White Paper, including Control Strategy #10, recommending development of a Pilot Odor Abatement Program in order to prevent exposure to odors. PR 410 is a direct result of a strategy proposed in the White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (Cumulative Impacts White Paper). Due to a high number of nuisance odor complaints from transfer stations and processing facilities, this industry was selected for development of the pilot odor rule. Development of an odor control rule will not conflict or obstruct implementation of the AQMP.

(b), (c) and (f) Potential secondary emission increases might occur from construction and operations of odor controls and increased sweeper usage. Incremental emission increases from these activities are described in the following subsections and detailed in Appendix C. The analyses in the following subsections show that potential adverse air quality impacts from implementing PR 410 do not exceed the applicable CEQA significance thresholds in Table 2-1 and; therefore, are not expected to create significant adverse construction air quality impacts.

Table 2-1
Air Quality Significance Thresholds

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants ^d		
NO2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.25 ppm (state) 0.053 ppm (federal)	
PM10 24-hour average annual geometric average annual arithmetic mean	10.4 µg/m ³ (recommended for construction) ^e & 2.5 µg/m ³ (operation) 1.0 µg/m ³ 20 µg/m ³	
Sulfate 24-hour average	25 µg/m ³	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

^a Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

^d Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

^e Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million $\mu\text{g}/\text{m}^3$ = microgram per cubic meter \geq greater than or equal to

Construction Activity Impacts

PR 410 may require construction to install misting systems, additional walls for partial enclosures, wind barriers and weather stations. The following subsections describe construction activities that may occur to install odor control equipment. Construction of misting systems and weather stations are not expected to require diesel construction equipment.

Construction of wind barriers would require the installation of a series of posts with wind resistance material placed between the posts. Construction of wind barriers is not expected to require, much if any, construction equipment (forklift and cement mixer). Wind barriers are expected to be built at all eleven facilities with outdoor green waste operations.

Construction of additional walls for existing partial enclosures is expected to require the most construction in terms of numbers of equipment and activity levels of equipment. SCAQMD staff estimates that an additional 200-foot long, 24-foot high wall would need to be built at two facilities. It was assumed that concrete tilt-up walls would be constructed as a worst-case scenario. Concrete tilt-up walls would require at least two phases of construction. The first phase would require the pouring of concrete into forms to create the walls. The second phase would require a crane to tilt the walls into place. It is expected that the walls would be constructed out of light gauge steel sheeting. Light gauge steel sheeting would require fewer emissions, since steel sheeting would not require concrete mixers and may be built without the need of a crane. Peak daily construction emissions to build two tilt-up walls are shown in Table 2-2. Detailed construction assumptions, methodology, and calculations are presented in Appendix C.

Table 2-2
Construction Impacts from Installation of Two Tilt-up Walls and Three Wind Barriers

Sources	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Two Tilt-up Walls	23.4	4.8	48.8	2.2	2.2
Three Wind Barrier Emissions	14.8	3.0	32.7	2.0	1.5
Maximum Daily Emissions	38	8	81	4	4
Significance Threshold	550	75	100	150	150
Exceed Significance?	No	No	No	No	No

Construction at New Facilities

PR 410 does not require construction of new transfer station or MRF facilities. After adoption of PR 410, any construction of new facilities would occur for reasons unrelated to PR 410. Like any new land used project, a new facility would likely be subject to CEQA by the local land use agency or CIWMB and, therefore, would be required to undergo its own CEQA analysis. Therefore, this analysis does not include impacts from new facilities as this is considered to be outside the scope of PR 410.

PR 410 is also not expected to require facilities to significantly modify their solid waste operations or facilities, such that it would alter discretionary permits other than the addition or modification of odor techniques as described in PR 410. All modifications potentially caused by PR 410 are

examined in this Draft EA. Substantial modifications to solid waste operations that would alter existing discretionary permits would be subject to CEQA by the appropriate local agency and, therefore, would be required to undergo its own CEQA analysis. Therefore, this analysis does not include impacts from modifications to facilities that are not caused by PR 410.

Operational Activity Impacts

Sweeper Trucks

All affected facilities sweep their facilities under state requirements. PR 410 would required that facilities with throughput greater than 100 tons per day would be required to sweep the tipping floor, transfer tunnel and facility parameter once per day as part of their OMPs. Some existing transfer station and MRF operators currently sweep their facilities on a daily basis. To be conservative, it was assumed that an additional mile of travel would be swept per day at all 48 transfer stations or MRFs for a total of 48 miles per day. Estimated emissions from sweeper trucks traveling an additional 48 miles per day are presented in Table 2-3.

Odor Maskants or Neutralizer Delivery Truck Trips

Odor maskants or neutralizers are not required by PR 410; however, facilities that have misting systems typically add odor maskants or neutralizers. Only facilities greater with throughput greater than 250 tons per day are required to implement Level 1 or Level 2 control strategies. Only 40 of the affected facilities have throughput greater than 250 tons per day. It was assumed as a worst-case that each of the 40 facilities with throughput greater than 250 tons per day would use one delivery of odor maskant or neutralizer a week. One delivery per facility per week would be an average of eight trips per day $[(40 \text{ facilities}) / (5 \text{ day/week}) = 8 \text{ deliveries per day}]$. To be conservative, it was assumed that 16 deliveries per day would occur. It was also assumed that each delivery truck travels 80 miles round trip (40 miles per one way trip). Estimated emissions from truck delivery of odor maskants or neutralizers are presented in Table 2-3.

Odor Maskants or Neutralizer VOC Emissions

Odor maskants and neutralizers may contain VOCs. Deodorants and odor neutralizers are typically use in a ratio of one part odor maskant or neutralizer to 500 parts water and was used for this analysis. Based on a review of odor maskants and neutralizer MSDSs, the worst-case VOC content was estimated to be 10 percent. Misting nozzle parameters used in this analysis were supplied by vendors. Table 2-3 shows that an estimated 17.6 pounds of VOC are emitted per day from the use of odor maskants or odor neutralizers. Detailed assumptions and calculations are presented in Appendix C.

The total operational emissions from complying with PR 410 are presented in Table 2-3, and, as shown in the table, are below the significance thresholds presented in Table 2-1. Therefore, PR 410 is not significant for operational criteria pollutant emissions.

**Table 2-3
Operational Emission Summary**

Source	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Sweeper	0.6	0.1	1.7	0.02	0.1
Odor Maskant/Neutralizer Delivery Trucks	6.3	1.7	35.5	0.5	0.8
Odor Maskant/Neutralizer Emissions		17.6			
Total Operational Emissions	6.9	19.4	37.2	0.5	0.9
Operational Significance Threshold	550	55	55	150	150
Exceed Significance?	NO	NO	NO	NO	NO

Health Risk Analysis

Diesel particulate exhaust is classified as a carcinogen. Diesel exhaust is emitted both from construction equipment during construction and from sweepers and odor maskant or neutralizer delivery trucks during operation. No other air toxic pollutants were identified from activities associated with the adoption of PR 410.

Carcinogenic health risk is estimated over a 70-year exposure duration for risk management purposes. Since carcinogenic health risk values are developed from long-term studies, it is unclear if these values are valid for short time scales. The shortest exposure duration allowed by OEHHA is nine years. Since construction required by PR10 OMPs would occur over a couple of days, carcinogenic health risk was not estimated from construction equipment diesel exhaust particulate.

The incremental increase in sweeper truck, and odor maskant and/or neutralizer delivery truck deliveries would occur over the life span of the existing transfer station or MRF operations. Since health risk analysis is a localized impact, diesel exhaust particulate emissions from increase use or delivery at an existing facility were estimated using worst-case health risk parameters. Diesel exhaust particulate emissions are presented in detail in Appendix C. Health risk was estimated according to the Tier II procedures presented in the Risk Assessment Procedures for Rules 1401 and 212, Version 7.0, July 1, 2005 with parameters from Attachment L. While these procedures were developed for permitted stationary sources, the methodology is applicable to any stationary source emitting toxic air pollutants over an extended length of time. Since health risk is a localized analysis, the analysis included diesel particulate emissions from truck deliveries and sweeper trips at a single facility. Maximum carcinogenic risk from operational diesel exhaust particulate emissions from a typical affected facility was estimated to be 0.1 in a million. This is less than the carcinogenic health risk significance threshold of 10 in a million. The chronic non-carcinogenic hazard index was estimated to be 0.004 for the respiratory system, which is less than the chronic non-carcinogenic significance threshold of 1.0. An acute non-carcinogenic reference exposure limit has not been established so no acute non-carcinogenic hazard index could be estimated.

SCAQMD staff identified only two facilities of the 48 permitted facilities that are near to each other. The facilities are across the street from each other. Although the Tier II risk assessment

procedure was designed to estimate health risk from a single facility, the resulting health risk from two or more facilities could be added together for a conservative estimate. However, the resulting health risk would be conservative since the source receptor distances, release parameters and meteorological data affecting each source are unlikely to result in worst-case impacts at the same receptor. Using this conservative approach the carcinogenic risk from two facilities would be 0.2 in a million (0.1×2), which is still less than the carcinogenic health risk significance threshold of 10 in a million. The hazard index would be 0.008 for the respiratory system, which is still less than the chronic non-carcinogenic significance threshold of 1.0.

Although no toxics were found in odor maskants or neutralizer MSDSs compiled and reviewed by SCAQMD staff, as a precaution, PR 410 includes provision that requires odor maskants or neutralizers to be non-toxic and meet all applicable local, state and federal requirements. Therefore, there would be no health risk from the odor maskants or neutralizers.

Therefore, the operational health risk is less than significant for both carcinogenic and non-carcinogenic health risk.

Conclusion

The intent of the proposed rule is to further reduce odors from transfer stations and MRFs in the district. This would be accomplished through implementation of OMPs required by PR 410. Secondary emissions from construction and operational activities may increase criteria and toxic emissions; however, as shown above, the secondary emissions are below all applicable air quality significance thresholds for construction and operation.

As a result of the above analysis, the proposed project is not expected to violate any air quality standards, contribute to an existing or projected air quality violation, result in a cumulatively considerable net increase of any criteria pollutant, or diminish an existing air quality rule or future compliance requirement.

d) Sensitive receptors in the district are currently exposed to daily odors, criteria and toxic pollutants. PR 410 would reduce odors from transfer stations and MRFs. PR 410 would expose sensitive receptors to increased secondary emissions. As shown in the previous discussion, the increased secondary criteria and toxic emissions are below all applicable significance thresholds presented in Table 2-1. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations.

e) Odors are often associated with diesel emissions. Potential odor impacts from the proposed project are not expected to be significant because the incremental increase in the operation of heavy-duty construction vehicles, sweepers or delivery would last for short periods of time so it is not likely that substantial odors would accumulate at any individual site. PR 410 is designed to reduce odors from transfer station and MRF operations. Therefore, PR 410 would reduce objectionable odors affecting receptors neighboring transfer stations and MRFs.

Based on the above discussion, the proposed project is not expected to cause significant adverse air quality impacts. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on biological resources would be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

DISCUSSION

(a) and (b) In general, the net effect of PR 410 would be reducing odors from odors from transfer stations and MRFs in the district. Since any construction would occur on-site in existing industrial facilities, and is not expected to involve earthmoving operations; there are no provisions in the proposed rule that require or result in any specific disturbance of undisturbed habitat or have a direct or indirect impact on plant or animal species. No reductions in sensitive plant or animal species are expected to result from implementing the odor control measures outlined in the proposed rule. No riparian habitat or other sensitive natural community would be affected by PR 410.

(c) The proposed rule is expected to incrementally increase existing efforts at existing facilities in the district to control odors. The proposed project does not require any direct removal, filling, hydrological interruption, or other activities in, or near, wetland areas as defined by §404 of the Clean Water Act (CWA). Thus, no adverse effects on these areas are expected.

(d), (e) and (f) Construction to install misting systems and weather stations; addition additional walls to partial enclosures; and install wind barriers is anticipated to occur at existing affected facilities. The proposed rule is expected to incrementally increase existing efforts in the district to control odors. There are no provisions in the proposed rule that conflicts with any local policies or ordinances that protect biological resources, such as Habitat Conservation Plans. The proposed project would not interfere with the movement of any native or migratory animals, affect wildlife corridors, or impede the use of native wildlife nursery sites.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on biological resources. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANCE CRITERIA

Impacts to cultural resources would be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.
- Unique paleontological resources are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

DISCUSSION

a) through d) In general, the net effect of the proposed rule would be to reduce odors at existing transfer stations and MRF operations across the district. Any construction would occur at existing transfer stations or MRFs in locations that have been previously disturbed (i.e., roads, storage piles, existing equipment). The proposed rule would require the addition of odor control technology or techniques as a part of OMPs. The proposed rule does not require the demolition of buildings or structures. Construction of additional walls to existing partial enclosures is expected at two affected facilities. Staff expects that constructing new walls would be accomplished by adding tilt-up walls on previously paved areas. The addition of wind screens and misting systems would require minor construction and is not expected to involve heavy construction equipment. Therefore, no earthmoving would be required at affected facilities to comply with PR 410. Since construction would occur on previously disturbed areas in existing industrial facilities,

construction activities are not expected to adversely affect cultural resources. No changes to historic, archaeological or paleontological resources or unique geologic features are required upon implementation of the proposed rule. Since all activities associated with PR 410, with the exception of sweeping, would occur on-site; no disturbance of human remains or cemeteries is anticipated as a result of adopting and implementing the proposed project.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on cultural resources. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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VI. ENERGY. Would the project:

a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANCE CRITERIA

The impacts to energy and mineral resources would be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

DISCUSSION

a) through e) In general, the net effect of the proposed rule would be to reduce odors from transfer station and MRF operations in the district. There are no provisions within the proposed rule which would conflict with adopted energy conservation plans, result in the need for additional power or natural gas, create impacts on local or regional energy supplies, impact existing energy standards, or affect peak and base demands for electricity or other forms of energy.

Minor increases in diesel fuel use would occur during the constructions of walls at two affected facilities onto existing partial enclosures and from any increased sweeping required by the OMPs. Construction of the walls is expected to take less than three days at each facility using an average of three pieces of construction equipment per day each with a horsepower of 194 or less. Based on these assumptions the amount of diesel fuel used for construction is assumed to be insignificant.

SCAQMD staff estimates that approximately 48 facilities would be affected by PR 410. Assuming that operators sweep on average approximately one mile of road at each facility, approximately 48 miles per day would be swept. EMFAC2002 estimates the diesel fuel economy for a high-duty truck traveling 15 miles per hour to be 4.65 miles per gallon. Therefore, approximately ten gallons of diesel fuel would be used per day by sweepers ((48 facilities x 1 mile)/4.65 miles/gallon = 10 gallons).

Affected facilities with throughput greater than 250 tons per day may also choose to use odor maskants or neutralizers. Assuming that all 40 facilities with throughput greater than 250 tons per day used odor maskants or neutralizers, and that one delivery would be needed per week; the average number of delivery trucks per day would be eight. To be conservative SCAQMD staff doubled the average number of eight truck trips to sixteen truck trips per day. SCAQMD staff assumes an average round trip of 80 miles. Therefore 275 gallons of diesel would be required to complete the delivery of odor maskants and or neutralizers ((16 trips x 80 miles/trip)/4.65 miles/gallon = 275 gallons).

The total amount of diesel that might be used for PR 410 would be about 285 gallons per day. The California Energy Commission estimates that approximately five billion gallons of diesel fuel is used per year in California². An increase of 285 gallons per day would be insignificant and is not considered to be a wasteful use of an energy resource.

If all affected facilities were to prepare PR 410 OMPs, 40 of the facilities would be required to identify and implement Level 1 or Level 2 control strategies. Of the 40 facilities, 18 facilities have existing misting systems. If the remaining operators installed misting systems at the remaining 22 facilities, it is estimated that an additional 1,312 kilowatts per day would be required to power pumps associated with the misting system. According to the Los Angeles Department of Water and Power's (DWP) Draft 2006 Integrated Resource Plan, 23 million megawatt hours of power were sold in 2005. The 1,312 kilowatts per day would be less than a fraction of a percent of the 23 million megawatts. DWP is only one of the energy suppliers that would supply affected facilities; DWP alone would be able to accommodate the energy usage. Therefore, the 1,312 kilowatts per day would be less than significant and not considered to be wasteful use of an energy resource.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on energy resources. Since no significant adverse impacts are anticipated, no mitigation measures are required.

² California Energy Commission, California Alternative Fuels Infrastructure Program Evaluation 2003, October 2003.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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VII. GEOLOGY AND SOILS. Would the project:

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|----|--|--------------------------|--------------------------|-------------------------------------|
| a) | Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | • Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | • Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | • Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) | Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) | Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

Impacts on the geological environment would be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, and compaction or over covering of large amounts of soil.

- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

DISCUSSION

a), c), & d) The proposed rule is intended to reduce odors from transfer stations and MRF operations. Odor control activities would occur at existing facilities, so any risks associated with ground shaking, etc., are existing risks. Any structure built to comply with PR 410 (wall, misting systems, wind barriers, etc.) would have to comply with relevant requirements of the Uniform Building Code and any other state, county and city building and safety codes which account for seismic activity. The proposed rule does not require the construction of any building or new structures that could be located on an unstable geologic unit or on expansive soil, which could create substantial risks to life or property, but may require additional control to be applied to existing equipment.

b) The proposed rule does not contain any provisions that would require disruption of soils that could result in soil erosion or loss of topsoil, because odor controls are assumed to be built on existing concrete paved areas. Dust control pursuant to Rule 403 would be required for any construction occurring on exposed soils.

c) The installation of add-on controls at existing affected facilities to comply with the proposed project is expected to conform to the Uniform Building Code and all other applicable state and local building codes. As part of the issuance of building permits, local jurisdictions are responsible for assuring that the Uniform Building Code is adhered to and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represents the foundation condition at the site. The Uniform Building Code requirements also consider liquefaction potential and establish stringent requirements for building foundations in areas potentially subject to liquefaction. Thus, the proposed project would not alter the exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards.

e) The proposed rule does not include any provisions that require the installation of septic tanks or alternative wastewater systems. Therefore, there is no possibility of installation of water disposal systems in soils incapable of supporting them.

Based on the above discussion, the proposed project is not expected to have an adverse impact on geology or soils. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

- | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|
| a) | Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) | Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) | For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANCE CRITERIA

The impacts associated with hazards would be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

DISCUSSION

a) through c) In general, the net effect of PR 410 would be to reduce odors from transfer stations and MRF operations in the district. There are no provisions in the proposed rule which would require or result in the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public; emit hazardous emissions, or require the handling of hazardous materials within one-quarter mile of an existing or proposed school.

While there are no PR 410 requirements that necessitate the use of odor maskants or neutralizers, some operators may voluntarily choose to use of odor maskants or neutralizers with misters to control odors. Although no toxics were found in odor maskants or neutralizer MSDSs compiled and reviewed by SCAQMD staff, as a precaution, PR 410 includes provision that requires odor maskants or neutralizers to be non-toxic and meet all applicable local, state and federal requirements. Further, it is the responsibility of the users to ensure that any odor maskants or neutralizers they use is not prohibited for use by the Regional Water Quality Control Boards; the California Air Resources Board; the U.S. EPA; any applicable law, rule or regulation; and should meet any specifications, criteria or test required by the federal, state or local water agency. The primary affect expected as a result of using odor maskants or neutralizers is the potential for groundwater contamination. This effect is discussed in detail under “IX. Hydrology and Water Quality.” Odor maskants and neutralizers are currently widely use by transfer station and MRF

operators that use misters. As a result, it is not expected that any incremental increase in the use of odor maskants or neutralizers would expose users or the public to hazardous materials.

d) Government code §65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). If any affected sites or operations are identified on such a list, compliance with the proposed project is not expected to affect in any way any facility's hazardous waste handling practices.

e) & f) The proposed project does not involve the use of hazardous materials that could adversely affect air traffic or safety. Therefore, even affected projects located within an airport land use plan, within two miles of a public airport or within the vicinity of a private airstrip are not expected to generate significant adverse hazards or hazardous materials impacts on air traffic or safety.

g) The proposed rule is intended to reduce odors and contains no provisions that could interfere with any adopted emergency response or evacuation plans.

h) & i) Any construction as a result of PR 410 would occur on existing transfer station or MRF operations. The proposed rule does not require the construction of any building, structure or facility in wildlands or any location that could expose people or structures to significant loss, injury, or death involving wildland fires. Similarly, complying with the proposed rule does not require or involve the use of flammable materials that could increase fire hazards in areas with flammable materials.

Based on the above discussion, the proposed project is not expected to create a hazard or hazardous materials impact. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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IX. HYDROLOGY AND WATER QUALITY.

Would the project:

- | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact	No Impact
l) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
m) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
n) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o) Require in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SIGNIFICANCE CRITERIA

Potential impacts on water resources would be considered significant if any of the following criteria apply:

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project would result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.

- The project increases demand for water by more than five million gallons per day.

DISCUSSION

There are potential water resource impacts that may be generated by misting systems expected to be used for odor control at transfer station and MRF operations throughout the district. The project-specific impacts are divided into two major impact categories - water quality and water demand.

Potential Water Quality Impacts from Deodorants and Odor Neutralizers

a), f), k), l) & m) The following paragraphs describe the characteristics of odor maskants or neutralizers and their potential to adversely affect groundwater or surface water. (The SCAQMD does not endorse any particular product, but does encourage the use of environmentally safe odor maskants or neutralizers.) It should be noted that although many of these products and control measures required for odor control are used to address Rule 402 – Nuisance, the analyses in this document are based on conservative assumptions, because not all operators may use misting systems, or odor maskants or neutralizers.

While there are no PR 410 requirements that necessitate the use of odor maskants or neutralizers, some operators may voluntarily choose to use of odor maskants or neutralizers with misters to control odors. Although no toxics were found in odor maskants or neutralizer MSDSs compiled and reviewed by SCAQMD staff, as a precaution, PR 410 includes provision that requires odor maskants or neutralizers to be non-toxic and meet all applicable local, state and federal requirements. Odor maskants/neutralizers are often already used for odor control to avoid violating Rule 402 and other nuisance regulations and local programs. In addition, it is the responsibility of the users to ensure that any odor maskants and/or neutralizers they use are not prohibited for use by the Regional Water Quality Control Boards; the California Air Resources Board; the U.S. EPA; any applicable law, rule or regulation; and should meet any specifications, criteria or test required by the federal, state or local water agency. Potential users of odor maskants/neutralizers should contact local RWQCBs to determine whether or not a product is environmentally safe. Users must apply odor maskants and neutralizers in accordance with manufacturers' and RWQCB recommendations to ensure that water quality is protected. Users are currently required to ensure that any runoff does not migrate to a surface body of water, and PR 410 would affect this requirement. Therefore, any potential adverse impacts would be insignificant.

Municipal solid waste and green waste includes a certain amount of liquid. The addition of water, or odor maskants or neutralizers would increase the amount of liquid in the waste. However, water and odor maskants/neutralizers are typically applied in a fine mist-aerosol (10 micron diameter droplets) from misting systems and typically evaporate from the surface of the waste. The goal of misting systems is to lightly wet the surface of the waste to reduce odors. Operators do not want to saturate the waste, since it increases hauling/disposal cost and fees. Water, odor maskants or neutralizers that drain from the waste would be captured, handled and/or treated like the existing liquid that drains from the waste. If any liquid does drain from the waste, the waste handling areas of transfer facilities and MRFs are designed to capture liquids from waste. It is assumed that misting system would be designed to prevent any additional run-off from the waste.

Since misting systems are not expected to cause run-off, the proposed rule does not have any provisions that affect an existing affected facility or site's production of wastewater or discharge infrastructure. As a result, the proposed project would not be expected to cause any facility to exceed wastewater treatment requirements of any applicable regional water quality control board. Similarly, since the proposed project has no effect on production of wastewater at any affected site or facility, construction of new, or expansion of existing wastewater treatment plants or storm water drainage facilities is not expected as a result of adopting and implementing the proposed rule. Therefore, the proposed project would not generate significant adverse impacts to water quality.

Potential Water Demand Impacts from Misting Systems

b), n) & o) The proposed rule is intended to reduce odors from transfer stations and MRFs. As noted in previous discussions, implementing the proposed rule could incrementally increase the use of misting systems at these affected facilities throughout the district.

Misting with water, odor maskants or neutralizers is currently being used as one of a number of odor suppression methods for transfer stations and MRFs. State nuisance law (Cal. Health and Safety Code § 41700) restricts odors to levels that do not "... cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public..." Eighteen facilities are believed to use misters for the tipping floor. No facilities are assumed to use misters for transfer tunnels.

Implementation of the proposed rule would create an incremental additional demand for water in odor activities. Water could be used by itself for wet suppression, or in conjunction with certain odor control agents. A worst-case scenario was developed based on the assumption that all facilities would use water in misters and that no affected facilities currently use misters. Eighteen facilities currently use misters to control odors. Based on the permitted solid waste levels from the CIWMB's Solid Waste Information System, assumptions of the area required to process the permitted tonnage, and information provided by a misting system vendor an estimated 37,000 gallons of water would be required per day from misters for the remaining 22 facilities that currently do not have misters used according to PR 410 OMPs. This is less than the significance threshold of five million gallons per day. Therefore, the water usage associated with PR 410 is less than significant.

Other Potential Impacts

c), d) & e) The proposed project does not involve altering the course of any stream or river, nor is it expected to alter any existing drainage patterns at affected sites that could result in soil erosion or provide additional sources of polluted runoff. The proposed project does involve increasing odor control practices at affected sites or facilities. However, the volume of water anticipated to be used would not substantially increase the rate or amount of surface runoff at any affected facility in the district in a manner that would result in flooding, either on- or offsite, since the rule only requires that operators at affected facilities reduce odor from waste.

g), h), i) & j) The proposed project does not require the construction of any buildings or other structure in a 100-year flood hazard area, which could impede or redirect flood flows. Similarly, the proposed project does not involve construction of structures, levees, or dams that could expose

people or structures to a significant risk of loss, injury or death resulting from the failure of a levee or dam. Finally, the proposed project does not require construction of buildings or any other structures in or near areas that could be inundated by seiche, tsunami, or mudflow.

Based on the above discussion, the proposed project is not expected to have an adverse impact on hydrology and water quality. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANCE CRITERIA

- Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

DISCUSSION

a) through c) The net effect of PR 410 would reduce odors from transfer station and MRF operations in the district. No land use or planning requirements would be altered by the proposed project. The proposed amendments would not physically divide an established community, nor conflict with any land use, habitat conservation or natural community conservation plans.

PAR 410 does not require the construction of new facilities or modify the solid waste throughput at existing facilities. Both the construction of new facilities and the modification of solid waste throughput would require new or modified discretionary permits. Therefore, it is expected that any future new facilities or modification of solid waste throughput at existing facilities would be reviewed under CEQA by the appropriate local public agency. Since future new facilities or modification of solid waste throughput at existing facilities is not tied to this proposed project and cannot be predicted, analysis of potential impacts is considered speculative and therefore cannot be analyzed at this time. Any environmental impacts from future new facilities or modification of

solid waste throughput are expected to be analyzed during the CEQA review of that specific project.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on land use and planning. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XI. MINERAL RESOURCES. Would the project:

- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

Project-related impacts on mineral resources would be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

DISCUSSION

a) and b) No provisions of the proposed rule is expected to result in the loss of availability of known mineral resources, such as aggregate, minerals, etc., or the loss of availability of a locally-important mineral resource site. The net effect of the proposed rule would reduce odors from transfer station and MRF operations in the district.

Based on the above, no adverse impacts on mineral resources are expected. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XII. NOISE. Would the project result in:

- | | | | | |
|----|--|--------------------------|--------------------------|-------------------------------------|
| a) | Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) | A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) | For a project within the vicinity of a private airship, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

Impacts on noise would be considered significant if:

- Construction noise levels exceed local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.

- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

DISCUSSION

a), b), c) & d) Noise is usually defined as sound that is undesirable because it interferes with speech communication and hearing, is intense enough to damage hearing, or is otherwise annoying (unwanted noise). Sound levels are measured on a logarithmic scale in decibels (dB). The universal measure for environmental sound is the "A" weighted sound level, dBA, which is the sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. "A" scale weighting is a set of mathematical factors applied by the measuring instrument to shape the frequency content of the sound in a manner similar to the way the human ear responds to sounds.

The State Department of Aeronautics and the California Commission of Housing and Community Development have adopted the Community Noise Equivalent Level (CNEL). The CNEL is the adjusted noise exposure level for a 24-hour day and accounts for noise source, distance, duration, single event occurrence frequency, and time of day. The CNEL considers a weighted average noise level for the evening hours, from 7:00 p.m. to 10:00 p.m., increased by five dBA, and the late evening and morning hour noise levels from 10:00 p.m. to 7:00 a.m., increase by 10 dBA. The daytime noise levels are combined with these weighted levels and averaged to obtain a CNEL value. The adjustment accounts for the lower tolerance of people to noise during the evening and nighttime periods relative to the daytime period.

Federal, state and local agencies regulate environmental and occupational, as well as, other aspects of noise. Federal and state agencies generally set noise standards for mobile sources, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of General Plan policies and Noise Ordinance standards, which are general principles, intended to guide and influence development plans. Noise Ordinances set forth specific standards and procedures for addressing particular noise sources and activities. The Occupational Safety and Health Administration (OSHA) sets and enforces noise standards for worker safety.

One example of local jurisdiction requirements might be the City of Los Angeles. Existing operational noise generated from transfer station or MRF operations in Los Angeles would be subject to the City of Los Angeles Noise Element of the General Plan and/or the City of Los Angeles Municipal Code. Table 2-4 summarizes these requirements. Other local jurisdictions typically have similar requirements.

Construction-Related Noise

PR 410 may require some construction to comply with requirements in the OMP. Sources which may be expected to generate noise during temporary construction activities might include construction equipment, trucks, work-crew vehicular traffic, compressors and generators. Table 2-5 presents a range of noise levels for various types of equipment that may be used at a typical construction site. Because of the nature of this activity, the types, numbers, periods of operation, loudness of equipment, and distance to the closest sensitive receptor/residence, will vary with each construction phase and the size of the affected facility.

Table 2-4
City of Los Angeles Noise Requirements

Requirement	Construction Limit (dBA)	Operational Limit (exterior dBA except where noted)
Noise Element of the General Plan of the City of Los Angeles	65 dBA CNEL or less - considered "conditionally acceptable" for residential use. 70-75 dBA CNEL - considered "conditionally acceptable for industrial use".	65 dBA CNEL or less - considered "conditionally acceptable" for residential use. 70-75 dBA CNEL - considered "conditionally acceptable" for industrial use.
City of Los Angeles Municipal Code Chapter XI, Article 2, §112.05	Requires that noise levels generated by construction equipment within a residential zone not exceed 75 dBA.	Not applicable.
City of Los Angeles Municipal Code Chapter IV, Article 1, §41.40	Construction activities prohibited without a special permit between the hours of 10:00 p.m. and 7:00 a.m.	Not applicable.

Table 2-5
Typical Construction Noise Sources

Equipment Type	Typical Range (decibels)
Tractors/Crawlers/Dozers (up to 450 hp)	78 to 82
Diesel Trucks (100 to 400 hp)	72 to 81
Backhoe (85 hp)	76
Forklift (40 hp)	75
Air Compressor (25 hp or 230 hp)	75 or 80
Generator (22 hp or 550 hp)	73 or 85 @ rated hp

Construction activities at affected facilities to comply with PR 410 could result in increased noise levels for a short duration, which will cease once construction of the project is complete. Further, transfer stations and MRF operations are typically located in industrial or commercial areas. Transfer stations and MRF operations include large volumes of heavy-duty trucks and loaders, which currently generate noise that would be similar to the noise generated by the construction equipment required to install the odor controls.

In general, given ambient noise levels near affected facilities, noise attenuation (there is a six dBA drop in noise levels per doubling of distance), and compliance with local noise ordinances, potential construction noise impacts are not expected to be significant.

The proposed project affects primarily existing facilities and would not generate excessive noise levels outside the boundaries of the affected facilities, or expose people residing or working in the project area to excessive noise levels. The proposed project requires no additional equipment to the existing facilities which would cause noise level to exceed ambient levels.

Operation-Related Noise

No provisions of the proposed rule would expose persons to noise levels in excess of standards established in local general plans or ordinances, or standards of other agencies. With the exception of sweepers, none of the odor controls are expected to generate noise (enclosures, barriers, misting systems, weather stations, etc.) The proposed rule does not require the addition of any structure, building or facility that would expose people to groundborne vibration or noise, or increase ambient noise levels during operation (either temporary or permanent). Street sweepers would generate noise, but are expected to generate noise similar to the solid waste trucks and loaders already used on-site. Since all affected facilities sweep their facilities under state requirements, no new sweepers are expected.

In general, given ambient noise levels near affected facilities, noise attenuation (there is a six dBA drop in noise levels per doubling of distance), and compliance with local noise ordinances, potential operational noise impacts are not expected to be significant.

e) & f) No new structures, buildings or facilities are required as part of the proposed project. PR 410 may require additional walls, misting systems, wind barriers, and weather stations; however, noise from these control systems and equipment is not expected to exceed the profiles of existing structures at affected facilities, as a result, the proposed rule is not anticipated to affect in any way airport land use plans or private airstrips. Similarly, construction of odor controls is not expected to affect airport land use plans or private air strips.

Based on the above discussion, no adverse noise impacts are expected as a result of the proposed project. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XIII. POPULATION AND HOUSING. Would the project:

- | | | | |
|---|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

The impacts of the proposed project on population and housing would be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

DISCUSSION

a) through c) In general, the net effect of the proposed rule would control odors from transfer station and MRF operations in the district. Construction workers are assumed to be taken from the existing local labor pool. None of the odor controls are expected to require the need to hire additional employees. Therefore, no provision of the proposed rule induces growth either directly or indirectly; displaces any housing or substantial numbers of people, or requires the construction of replacement housing.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on population and housing. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XIV. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANCE CRITERIA

- Impacts on public services would be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

DISCUSSION

a) & b) The proposed rule would reduce odors from transfer station and MRF operations in the district. The proposed project does not involve the use of hazardous materials so no impacts to emergency responders, such as local fire or police departments, are anticipated. Similarly, the proposed project would not be expected to affect in any way service ratios, response times or other emergency responder performance objectives.

c), d) & e) No provision of the proposed rule requires the use of public services such as schools, parks or other public facilities. As indicated in the "Population and Housing" discussion, there are no provisions in the proposed rule that would induce population growth, which would require construction of additional schools, parks, or other recreational resources. As a result, it is not expected that the proposed project would cause or require physically altered public facilities. Further, enforcement activities required by PR 410 would be carried out by SCAQMD inspectors as part of their normal duties.

Based on the above discussion, the proposed project is not expected to create a significant adverse impact on public services. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XV. RECREATION.

- | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|
| a) | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

The impacts to recreation would be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

DISCUSSION

a) and b) The proposed rule would reduce odors from transfer station and MRF operations in the district. Because the proposed project is not expected to induce or redirect population growth, no provisions of the proposed rule would increase the need for additional parks or other recreational facilities, or cause the deterioration of existing facilities. The proposed rule does not require the development or construction of new recreational facilities or require the expansion of existing recreational facilities, which could have an adverse effect on the environment.

Based on the above discussion, the proposed project is not expected to have a significant adverse impact on recreation. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XVI. SOLID/HAZARDOUS WASTE. Would the project:

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

The proposed project impacts on solid/hazardous waste would be considered significant if the following occur:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

DISCUSSION

a) and b) The proposed rule would reduce odors from transfer station and MRF operations in the district. As stated earlier, no hazardous waste is expected to be generated by provisions of the proposed rule. While the proposed rule would require odor controls as part of OMPs, no provisions of the proposed project would generate new solid waste streams or involve or require new solid waste disposal activities directly. As a result, no impacts on landfill capacity are expected. The odor controls are not expected to interfere with the operations at the transfer station or MRF operations; therefore, implementation of the proposed rule would not impede or hinder in any way compliance with any applicable federal, state or local statutes related to solid or hazardous waste disposal.

Based on the above discussion, the proposed project is not expected to have significant adverse impacts on solid and hazardous waste. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XVII. TRANSPORTATION/TRAFFIC. Would the project:

- | | | | |
|--|--------------------------|--------------------------|-------------------------------------|
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Result in inadequate parking capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SIGNIFICANCE CRITERIA

The impacts on transportation/traffic would be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.

- A major roadway is closed to all through traffic, and no alternate route is available.
- There is an increase in traffic (e.g., 350 heavy-duty truck round-trips per day) that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.

DISCUSSION

(a) & (b) The proposed rule would reduce odors from transfer station and MRF operations in the district. Most impacts would occur during construction from construction worker, haul truck and delivery truck trips to and from each site. The worst-case would require 20 two-way trips (16 construction worker commute trips and four haul truck trips) from construction of odor controls (construction of walls for existing partial enclosures at two affected facilities). Traffic impacts from construction trips would not be significant because only 10 two way trips would occur for each site, the two sites are not near each other and the construction periods would be short in duration. In the air quality section it was determined that during operation one additional delivery truck trip to each of the separate facilities per week would be required for odor neutralizers and street sweeping after each shift would be required. Since there are forty facilities with a throughput of 250 tons per day, forty weekly delivery truck trips would be 16 daily truck trips. Eight additional delivery truck trips throughout the district are below the significance threshold of 350 trucks per day; and therefore, would not significantly adversely impact traffic at any one intersection or roadway segment. Street sweeping is not expected to significantly adversely impact traffic, because it would occur infrequently and for short durations of time and primarily on-site.

c) There are no requirements in the proposed rule which would affect air traffic patterns because the proposed project does not involve transport of any individuals or materials by plane. Further, as noted in the preceding discussion, the proposed rule does not generate an increase in traffic levels or a change in location that results in substantial safety risks to local airports or airstrips.

d) & e) There are no provisions in the proposed rule that require construction of design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment) that could create traffic hazards or result in inadequate emergency access, transportation/traffic design features, emergency access, or parking capacity.

f) & g) The proposed rule would not create an inadequate emergency access situation or inadequate parking capacity situation. There are no requirements in the proposed rule which would affect adopted policies, plans, or programs supporting alternative transportation. The proposed rule is intended to reduce odors from transfer station and MRF operations in the district.

Based on the above discussion, the proposed rule is not expected to generate a substantial number of new vehicle trips and therefore would not have a significant adverse impact on the transportation systems within the district. Since no significant adverse impacts are anticipated, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

- | | | | | |
|----|---|--------------------------|-------------------------------------|-------------------------------------|
| a) | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

DISCUSSION

(a) The proposed project may require construction to install two walls, misting systems, and wind barriers. However, as stated in throughout this checklist, the proposed rule is not expected to adversely affect the environment, reduce or eliminate any plant or animal species or destroy prehistoric records of the past. In general, the proposed rule would reduce odors from transfer stations and MRF operations in the district. The proposed rule would enhance the clarity and enforceability of odor reduction requirements from transfer station and MRF operations the district

(b) Based on the preceding analysis of environmental impacts, the proposed project is not expected to generate significant adverse project-specific impacts. As a result, the effects of the proposed rule on the environment are considered to be less than cumulatively considerable. Therefore, the proposed project is not expected to generate significant adverse cumulative environmental impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

(c) The proposed rule does not have the potential to cause environmental effects that would generate substantial adverse effects on human beings, either directly or indirectly. While there are air quality impacts from both construction and operations, the impacts were determined to be less than significant. The proposed rule is expected to reduce odors from affected sites and operations.

APPENDIX A

ABBREVIATIONS AND ACRONYMS

Abbreviations and Acronyms

Abbreviation/Acronym	Description
μ	Micro
AOMP	Alternative Odor Management Plan
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
CEQA	California Environmental Quality Act
CIWMB	California Integrated Waste Board
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CWA	Clean Water Act
dB	Decibel
dBA	Decibel A-weighted
DOHS	Division of Occupational Health and Safety
EA	Environmental Assessment
EF	Emission factor
ERPG	Emergency Response Planning Guideline
HP	Horsepower
kw	kilowatt
lb	Pound
LEA	Local Enforcement Agency
LOS	Level of Service
M	Meter
MDAB	Mojave Desert Air Basin
MICR	Maximum individual cancer risk
MRF	Material recovery facility
MSW	Municipal solid waste
MWD	Metropolitan Water District
NO ₂	Nitrogen dioxide
NOC	Notice of Compliance
NOV	Notice of Violation
NO _x	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NSR	New Source Review
OMP	Odor Management Plan
OIMP	Odor Impact Minimization Plan
OSHA	Occupational Safety and Health Administration
PM ₁₀	Particulate matter less than 10 microns in aerodynamic diameter
PPHM	Parts per hundred million
PPM	Parts per million
PR	Proposed Rule
RCRA	Resources Conservation and Recovery Act
RFI	Report of Facility Information
RWQCB	Regional Water Quality Control Board
S	Surface material silt content
SB	State Bill
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
SO _x	Sulfur oxides

Abbreviations and Acronyms (Continued)

<u>Abbreviation/Acronym</u>	<u>Description</u>
SSAB	Salton Sea Air Basin
TAC	Toxic Air Contaminant
TOC	Total Organic Compounds
T/PR	Transfer/Processing Report
UBC	Uniform Building Code
USEPA	United States Environmental Protection Agency
VMT	Vehicle miles traveled
VOC	Volatile organic compound
W	Mean vehicle weight

APPENDIX B

PROPOSED RULE 410

APPENDIX C

ASSUMPTIONS AND CALCULATIONS

Methodology and Assumptions Used Estimate Construction Emissions

Construction

- Two facilities would be required to add walls to existing partial enclosures.
 - Existing facilities have concrete tipping floor area; therefore, no earthwork would be required to built additional walls
 - Average wall is 100 feet long x 24 feet high (2,400 ft²)
 - Worst-case – additional wall would be a concrete tilt-up wall.
- The number of existing misting systems was estimated from interviews with SCAQMD inspectors and LEA representatives. If no location was specified for the existing misting system, it was assumed that the existing misting system served the tipping floor.
- Assumed weather stations would not take heavy-duty construction equipment to install; therefore, would not generate emissions.

Operation

- Assumed that each facility already uses a sweeper to satisfy state law.
- Assumed that one additional sweeper trip would be required by PR 410 for each facility. This is conservative, since some facilities already sweep required areas daily.
- Assumed that the average sweeper path is one mile long.
- Assumed that 40 facilities would receive an odor maskant/neutralizer trip weekly. Therefore, dividing 40 facilities by five days would result in eight daily trips.
- Assumed that the average round trip length for delivery trucks is 80 miles.
- Assumed that diesel trucks and sweepers idle 15 minutes per trip.
- Assumed that delivery trucks travel approximately 0.25 miles on affected facility sites.

Table C-1
Additional Enclosure Wall Construction- Phase I – Panel Forms

Construction Activity	Additional Enclosure Wall Construction - Phase I - Panel Forms			
Construction Schedule				

Equipment Type^a	No. of Equipment	hr/day	Crew Size
Rough Terrain Forklifts	1	7.0	8
Cement and Mortar Mixers	1	7.0	
Generator Sets	1	7.0	
Electric Welders	2	7.0	

Construction Equipment Combustion Emission Factors					
	CO	VOC	NOx	SOx	PM10
Equipment Type^b	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Rough Terrain Forklifts	0.451	0.112	0.846	0.150	0.079
Cement and Mortar Mixers	0.047	0.011	0.081	0.000	0.006
Generator Sets	0.330	0.098	0.678	0.001	0.050
Electric Welders	N/A	N/A	N/A	N/A	N/A

Construction Vehicle (Mobile Source) Emission Factors					
	CO	VOC	NOx	SOx	PM10
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Passenger Vehicles ^c	0.015165	0.001626	0.001634	0.00001	0.000079
Heavy-Duty Truck ^d	0.006308183	0.001402763	0.041540914	0.000403826	0.000774

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Construction Worker	8	20
Heavy Duty Truck ^a	2	40

Table C-1 (Continued)
Additional Enclosure Wall Construction- Phase I – Panel Forms

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Rough Terrain Forklifts	3.16	0.78	5.92	1.05	0.55
Cement and Mortar Mixers	0.33	0.08	0.57	0.00	0.04
Generator Sets	2.31	0.69	4.75	0.01	0.35
Electric Welders	N/A	N/A	N/A	N/A	N/A
Total	5.80	1.55	11.24	1.06	0.94

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Passenger Vehicles	4.85	0.52	0.52	0.00	0.025
Flatbed Truck	1.01	0.22	6.65	0.06	0.124
Total	5.86	0.74	7.17	0.06	0.15

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Emissions	11.7	2.3	18.4	1.1	1.1
Significance Threshold^e	550	75	100	150	150
Exceed Significance?	NO	NO	NO	NO	NO

Table C-1 (Continued)
Additional Enclosure Wall Construction- Phase I – Panel Forms

Notes:

Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell. Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

a) SCAQMD, staff estimate

b) 2006 SCAB values provided by the ARB, Aug 2004. Assumed equipment is diesel fueled except the welders which are powered by the generator.

c) http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF03_25.xls

d) http://www.aqmd.gov/ceqa/handbook/onroad/onroadHHDT05_25.xls

e) SCAQMD Regional Significance Thresholds

Table C-2
Additional Enclosure Wall Construction- Phase II – Tilt-up Panels

Construction Activity	Additional Enclosure Wall Construction - Phase II - Tilt-up Panels			
Construction Schedule				

Equipment Type^a	No. of Equipment	hr/day	Crew Size
Cranes	1	5.0	6
Generator Sets	1	7.0	

Construction Equipment Combustion Emission Factors					
Equipment Type^b	CO	VOC	NOx	SOx	PM10
	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Cranes	0.360	0.094	1.095	0.196	0.056
Generator Sets	0.330	0.098	0.678	0.001	0.050

Construction Vehicle (Mobile Source) Emission Factors					
	CO	VOC	NOx	SOx	PM10
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Passenger Vehicles ^c	0.015165	0.001626	0.001634	0.00001	0.000079
Heavy-Duty Truck ^d	0.006308183	0.001402763	0.041540914	0.000403826	0.000774

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Construction Worker	6	20
Flatbed Truck ^a	4	40

Table C-2 (Continued)
Additional Enclosure Wall Construction- Phase II – Tilt-up Panels

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Cranes	1.80	0.47	5.48	0.98	0.28
Generator Sets	2.31	0.69	4.75	0.01	0.35
Total	4.11	1.16	10.23	0.99	0.63

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Passenger Vehicles	3.64	0.39	0.39	0.00	0.019
Flatbed Truck	2.02	0.45	13.29	0.13	0.248
Total	5.66	0.84	13.68	0.13	0.27

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Emissions	9.8	2.0	23.9	1.1	0.9
Significance Threshold^e	550	75	100	150	150
Exceed Significance?	NO	NO	NO	NO	NO

Table C-2 (Continued)
Additional Enclosure Wall Construction- Phase II – Tilt-up Panels

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a) SCAQMD, staff estimate

b) 2006 SCAB values provided by the ARB, Aug 2004. Assumed equipment is diesel fueled except the welders which are powered by the generator.

c) http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF03_25.xls

d) http://www.aqmd.gov/ceqa/handbook/onroad/onroadHHDT05_25.xls

e) SCAQMD Regional Significance Thresholds

**Table C-3
Wind Barrier Construction**

Construction Activity	Wind Barrier Construction
Construction Schedule	

Equipment Type^a	No. of Equipment	hr/day	Crew Size
Rough Terrain Forklifts	1	4.0	3
Cement and Mortar Mixers	1	7.0	

Construction Equipment Combustion Emission Factors					
	CO	VOC	NO_x	SO_x	PM₁₀
Equipment Type^b	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Rough Terrain Forklifts	0.451	0.112	0.846	0.150	0.079
Cement and Mortar Mixers	0.047	0.011	0.081	0.000	0.006

Construction Vehicle (Mobile Source) Emission Factors					
	CO	VOC	NO_x	SO_x	PM₁₀
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Passenger Vehicles ^c	0.013925	7.96612E-05	0.001489	0.000009	0.001497
Heavy-Duty Truck ^d	0.005932325	0.00132058	0.038930371	0.000405225	0.000730

Construction Worker Number of Trips and Trip Length		
Vehicle	No. of One-Way Trips/Day	One Way Trip Length (miles)
Construction Worker	3	20
Heavy Duty Truck ^a	2	40

Table C-3 (Continued)
Wind Barrier Construction

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Rough Terrain Forklifts	1.80	0.45	3.38	0.60	0.32
Cement and Mortar Mixers	0.33	0.08	0.57	0.00	0.04
Total	2.13	0.53	3.95	0.60	0.36

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Passenger Vehicles	1.67	0.01	0.18	0.00	0.180
Flatbed Truck	0.95	0.21	6.23	0.06	0.117
Total	2.62	0.22	6.41	0.06	0.30

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Emissions	4.8	0.8	10.4	0.7	0.7
Significance Threshold^c	550	75	100	150	150
Exceed Significance?	NO	NO	NO	NO	NO

Table C-3 (Continued)
Wind Barrier Construction**Notes:**

Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell. Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

a) SCAQMD, staff estimate

b) 2006 SCAB values provided by the ARB, Aug 2004. Assumed equipment is diesel fueled except the welders which are powered by the generator.

c) http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF03_25.xls, 2006 passenger vehicle

d) http://www.aqmd.gov/ceqa/handbook/onroad/onroadHHDT05_25.xls, 2006 heavy duty truck

e) SCAQMD Regional Significance Thresholds

**Table C-4
Construction Emissions Summary**

Construction of a Tilt-up Wall

Sources	CO lb/day	VOC lb/day	NO_x lb/day	SO_x lb/day	PM10 lb/day
Phase I - Concrete Pouring Emissions	11.7	2.3	18.4	1.1	1.1
Phase II - Panel Tilt-up Emissions	9.8	2	23.9	1.1	0.9
Maximum Tilt-up Enclosure Emissions	11.7	2.3	23.9	1.1	1.1

Construction of a Wind Barrier

Sources	CO lb/day	VOC lb/day	NO_x lb/day	SO_x lb/day	PM10 lb/day
Maximum Wind Barrier Emissions	4.8	0.8	10.4	0.7	0.7

Maximum Daily Construction Emissions

Sources	CO lb/day	VOC lb/day	NO_x lb/day	SO_x lb/day	PM10 lb/day
Two Tilt-up Walls	23.4	4.6	47.8	2.2	2.2
Three Wind Barrier Emissions	14.3	2.3	31.1	2.0	2.0
Maximum Daily Emissions	38	7	79	4	4
Significance Threshold	550	75	100	150	150
Exceed Significance?	No	No	No	No	No

**Table C-5
Operational Emissions Summary**

Description	Number of Daily Trips	Length of Round Trip, mile/day	Idling Time, min/day	CO	VOC	NO_x	SO_x	PM₁₀
Travel Emission Factor at 15 mph, g/mile				5.247	1.167	16.151	0.179	0.521
Travel Emission Factor at 35 mph, g/mile				2.243	0.603	12.578	0.179	0.269
Idling Emission Factor, g/hr								1.842
Travel Sweeper Truck Emissions, lb/day	48	1		0.56	0.12	1.71	0.02	0.06
Travel Odor Neutralizer Delivery, lb/day	16	80		6.33	1.70	35.49	0.51	0.76
Idling Sweeper Truck Emissions, lb/day	48		15					0.049
Idling Odor Neutralizer Delivery, lb/day	16		15					0.016
Total Sweeper Truck Emissions, lb/day				0.56	0.12	1.71	0.02	0.10
Total Odor Neutralizer Delivery, lb/day				6.33	1.70	35.49	0.51	0.78
Total Operational Emissions, lb/day				6.9	1.8	37.2	0.52	0.88
Operational Significance Threshold				550	55	55	150	150
Exceed Significance?				No	No	No	No	No

Travel emission factors were developed using EMFAC2002, v 2.2, 2006 fleet year, annual, South Coast Air Basin, 50F, 40% RH

Number of odor neutralizer delivery truck trips was estimated assuming one odor neutralizer delivery truck per facility per week and five days per week (40 facilities/day)/(5 day/week) = 8 trips per day. To be conservative, the eight trips per day was doubled to be 16 trips per day.

Assumed one additional sweeper trip at each of the 40 facilities and an average trip of one mile per trip.

Travel emissions, lb/day = (number of daily trips x length of round trip, mile/trip)/(453.59 g/lb)

Idling emissions, lb/day = (number of daily trips x idling time, min/day)/(453.59 g/lb x 60 min/hr)

Table C-6
Operational Health Risk Analysis Calculations

Emission Estimate

Description	Number of Trips	Length of Round Trip, mile	Idle Time, min	Op Time, day/yr	Traveling Emission factor, g/mile	Idling Emission Factor, g/hr	Travel Emissions, lb/day	Idling Emissions, lb/day	Total Emissions, lb/day	Total Emissions, ton/yr
Sweeper Truck	1	1	15	365	0.521	1.842	0.001	0.001	0.002	3.95E-04
Delivery Truck	1	0.25	15	52	0.521	1.842	0.0003	0.001	0.001	3.39E-05
Total							0.001	0.002	0.003	4.29E-04

Assumed an additional one mile sweeper truck trip and 0.25 mile delivery truck on-site travel distance.

Assumed 15 min of idling per trip

Travel emissions, lb/day = (number of daily trips x length of round trip, mile/trip x op time, day/year)/(453.59 g/lb)

Idling emissions, lb/day = (number of daily trips x idling time, min/day x op time, day/year)/(453.59 g/lb x 60 min/hr)

Carcinogenic Risk Analysis

Pollutant	Emission Rate, ton/yr	Cancer Potency (mg/kg-day)-1	Daily Breathing Rate, L/kg-day	X/Q [(ug/m3)/(ton/yr)]	MET	EVF	Afann	MP	Carcinogenic Risk
Diesel Exhaust	4.29E-04	1.1	302	41.45	1	0.96	1	1	1.37E-07

Cancer potency factor from the Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values

"Worst-case" daily breathing rate, X/Q, MET, EVF, Afann, and MP were taken from Risk Assessment Procedures for Rules 1401 and 212

Carcinogenic risk = emission rate, ton/yr x CP, (mg/kg-day)-1 x DBR, L/kg-day x X/Q, [(ug/m3)/(ton/yr)] x MET x EVF x Afann x MP

Table C-6
Operational Health Risk Analysis Calculations (cont.)

Chronic Non-carcinogenic Risk

Pollutant	Emission Rate, ton/yr	REL (ug/m3)	X/Q [(ug/m3)/(ton/yr)]	MET	MP	Chronic Hazard Index
Diesel Exhaust	4.29E-04	5.0	41.45	1	1	0.004

Cancer REL from the Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values
"Worst-case" daily breathing rate, X/Q, MET, and MP were taken from Risk Assessment Procedures for Rules 1401 and 212

Chronic hazard index = (emission rate, ton/yr x X/Q, [(ug/m3)/(ton/yr)] x MET x MP)/Chronic REL, ug/m3

Table C-7
Operational Emissions and Water Usage from Misting

Calculation of VOC Emissions From Transfer Stations and MRFs Due to PR 410

Assumptions:

1. Average in-use concentration of 500:1 for odor neutralizer
2. Worst-case VOC content of 10 percent
3. Misting nozzle coverage of 100 ft²
4. Misting nozzle flowrate of 0.025 gpm (manufacturer's specification)
5. 10 ft² of tipping floor surface per ton per day of waste processed (conservative assumption)
6. Odor neutralizer system utilization factor of 25 percent (odor neutralizers typically used only at perimeter of tipping floor, not used @ misting nozzles inside tipping floor)
7. Eight hr/day system utilization (conservative assumption)
8. Bulk density of odor neutralizer = 8.34 lb/gal
9. Permitted tonnage of facilities not known to have misting systems on tipping floor: 29,295 ton/day for 22 facilities
10. Four misting nozzles required for entrance or exit to transfer tunnels

Calculate:

Number of Nozzles Required per Ton/Day of MSW Processed:

(1 nozzle/100 ft²)*(10 ft²/1 ton MSW processed/day)

0.1 nozzles/ton_{MSW}

Water Flowrate (gallons/day) per Ton/Day of MSW Processed:

(0.1 nozzles/ton_{MSW})*(0.025 gal_{H2O}/min)*(60 min/hr)*(8 hr/day) =

1.2 gpd_{H2O}/ton_{MSW}

Total Water Flowrate (gallons/day)

1.2 gpd_{H2O}/ton_{MSW} * (29,295 ton_{MSW}) =

35,154 gpd_{H2O}

Odor Neutralizer Flowrate (gallons/day) per Ton/Day of MSW Processed:

(1.2 gpd_{H2O}/ton_{MSW})*(1 gpd_{ODOR NEUTRALIZER}/500 gpd_{H2O})*(25% utilization factor) =

0.0006 gpd_{ODOR NEUTRALIZER/ton_{MSW}}

Odor Neutralizer Usage (lbs/day) per Ton/Day of MSW Processed:

$(0.0006 \text{ gpd}_{\text{ODOR NEUTRALIZER/ton}_{\text{MSW}}}) * (8.34 \text{ lbs/gal}) =$

0.005 lbs/day_{ODOR NEUTRALIZER/ton_{MSW}}

Max VOC Content (lbs/day) of Odor Neutralizer per Ton/Day of MSW Processed:

$(0.005 \text{ lbs/day}_{\text{ODOR NEUTRALIZER/ton}_{\text{MSW}}}) * (10\% \text{ VOC}) =$

0.0005 lbs/day_{VOC/ton_{MSW}}

Max VOC Usage at Tipping Floors

$(0.0005 \text{ lbs/day}_{\text{VOC/ton}_{\text{MSW}}}) * (29,295 \text{ ton}_{\text{MSW}}) =$

14.6 lbs_{VOC/day}

Odor Neutralizer Used in Transfer Tunnels

Calculate:

Water Flowrate (gallons/day) per Transfer Tunnel:

$(4 \text{ nozzles}) * (0.025 \text{ gal}_{\text{H}_2\text{O}/\text{min}}) * (60 \text{ min/hr}) * (8 \text{ hr/day}) =$

48 gpd_{H₂O}

Total Water Flowrate (gallons/day)

$48 \text{ gpd}_{\text{H}_2\text{O}} * (38 \text{ facilities}) =$

1,824 gpd_{H₂O}

Odor Neutralizer Flowrate (gallons/day) per Transfer Tunnel:

$(48 \text{ gpd}_{\text{H}_2\text{O}}) * (1 \text{ gpd}_{\text{ODOR NEUTRALIZER}} / 500 \text{ gpd}_{\text{H}_2\text{O}}) =$

0.096 gpd_{ODOR NEUTRALIZER}

Odor Neutralizer Usage (lbs/day) per Transfer Tunnel:

$(0.096 \text{ gpd}_{\text{ODOR NEUTRALIZER}}) * (8.34 \text{ lbs/gal}) =$

0.8 lbs/day_{ODOR NEUTRALIZER}

Max VOC Content (lbs/day) of Odor Neutralizer per Transfer Tunnel:

$(0.8 \text{ lbs/day}_{\text{ODOR NEUTRALIZER}}) * (10\% \text{ VOC}) =$

0.08 lbs/day_{VOC}

Max VOC Usage at Transfer Tunnels

$(0.08 \text{ lbs/day}_{\text{VOC}}) * (38 \text{ facilities}) =$

3.0 lbs_{VOC/day}

Maximum Water Usage Expected from Rule 410 Proposal:

Tipping Floors 35,154 gpd_{H₂O}

Transfer Tunnels 1,824 gpd_{H₂O}

Total 36,978 gpd_{H₂O}

Maximum VOC Expected from Rule 410 Proposal:

Tipping Floors **14.6 lbs/day**
Transfer Tunnels **3.0 lbs/day**
Total **17.6 lbs/day**

Table C-8
Summary of Operational Emissions

Source	CO lb/day	VOC lb/day	NOx lb/day	SOx lb/day	PM10 lb/day
Sweeper	0.6	0.1	1.7	0.02	0.1
Odor Neutralizer Delivery Trucks	3.2	0.9	17.7	0.3	0.4
Odor Neutralizer/Maskant Emissions		17.6			
Total Operational Emissions	3.7	18.6	19.5	0.3	0.5
Operational Significance Threshold	550	55	55	150	150
Exceed Significance?	NO	NO	NO	NO	NO

Table C-9
Operational Power Estimate from Misting

**Calculation of Power for Misting Systems From
Transfer Stations and MRFs Due to PR 410**

There are 22 facilities that are currently permitted at 29,295 tons per day of municipal solid waste that do not have misting systems in place. Based upon the above statement, a total of fifteen horsepower of power for the misting systems would generate enough power to sufficiently provide adequate misting for those facilities, but we will provide a range of power based upon the assumptions below. The low end of the range would estimate all 22 facilities would install a 0.5 hp misting system and the high end would estimate that all 22 facilities would install a 10 hp misting system. The high end of the range would over estimate the power requirement by roughly 15 times.

Assumptions:

1. 22 facilities will need to install automatic misting systems on the tipping floor
2. All facilities subject to rule currently have misting systems on transfer tunnels
3. Eight hr/day system utilization (conservative assumption)
4. Power rating of pump motor ranges from 0.5 to 10 hp for flow rate of 0.05 to 13.0 GPM at 1,000 psi for the pump (from misting vendor)

Calculation:

Total Pump Motor Requirement (low end of range):

(0.05 hp)*(22 facilities) =

$$1.1 \text{ hp} * (0.746 \text{ kw/1 hp}) = 0.821 \text{ kw}$$

$$\text{Total Power Requirement per Day} \\ (0.821 \text{ kw}) * (8 \text{ hr/day}) = 6.568 \text{ kw/day}$$

$$\text{Total Pump Motor Requirement (high end of range):} \\ (10 \text{ hp}) * (22 \text{ facilities}) = \\ 220 \text{ hp} * (0.746 \text{ kw/1 hp}) = 164 \text{ kw}$$

$$\text{Total Power Requirement per Day} \\ (164 \text{ kw}) * (8 \text{ hr/day}) = 1,312 \text{ kw/day}$$